DOCUMENT RESUME

ED 395 190 CE 071 678

TITLE	Non-Collegiate-Level Academic and Technical Leveling or Bridge Courses for Tech Prep Non-Completers. Final Report.
INSTITUTION	Texas State Technical Coll., Marshall.
SPONS AGENCY	Texas Higher Education Coordinating Board, Austin.
PUB DATE	[95]
NOTE	551p.
PUB TYPE	Reports - Descriptive (141) -- Guides - Classroom Use - Teaching Guides (For Teacher) (052)
EDRS PRICE	MF02/PC23 Plus Postage.
DESCRIPTORS	Adult Students; *Articulation (Education); *College Programs; College Students; *Competency Based Education; *Curriculum Development; Drafting; Individualized Instruction; Learning Activities; Learning Modules; Mathematical Applications; Mathematics Instruction; Pacing; Reading Instruction; *Technical Education; *Tech Prep; Two Year Colleges; Writing Instruction
IDENTIFIERS	Texas State Technical College

ABSTRACT

A project at Texas State Technical College developed a curriculum to bridge the gap between the competency level of persons who enter college having completed the secondary component of a tech prep program and those who had not. The project used a technical advisory committee, two task forces, and a panel of experts to identify the competency profile of tech prep completers and to create a curriculum based on these competencies. (It was determined that students who had not completed a tech prep program possessed few, if any, of the competencies of those who had completed a tech prep program). The curriculum that was developed focused on competency-based, individualized, self-paced courses for mathematics, writing, and reading courses. Instructors were trained in the unique needs of adult students and the use of course development software. A management system was developed for tracking individual students through the self-paced process. The result of the project is a Bridge Program Quarter that provides concentrated effort to prepare students for college-level work. This quarter enables students to progress through two mathematics courses and two communications courses that move them from basic mathematics to intermediate algebra and from basic writing skills to college-level composition and prepare them to pass a competency test. (The self-paced modules for courses in mathematics, writing, reading, and drafting are included. Modules include a course description, course objectives, course outline, learning activities, assignments, and evaluation criteria. Also included in the report are the competency descriptions, workshop materials, complete project materials, and an annotated bibliography listing 28 references.) (KC)

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ED 395 190

CARL D. PERKINS GRANT #44170028

NON-COLLEGIATE-LEVEL ACADEMIC AND TECHNICAL LEVELING OR BRIDGE COURSES FOR TECH PREP NON-COMPLETERS

FINAL REPORT

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To insist on one's place in the scheme of things
and to live up to that place,
To empower others in their reaching for
some place in the scheme of things,
To do these things is to make fair tales come true.

Robert Fulghum

Non-Collegiate-Level Academic and Technical Leveling
or Bridge Courses for Tech Prep Non-Completers

FINAL REPORT

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Executive Summary

A Model Bridge Program for Tech Prep Non-Completers

EXECUTIVE SUMMARY

This project was undertaken to develop curriculum to bridge the gap between the competency level of persons who enter college having completed the secondary component of the Tech Prep program and those who had not. The project activities identified the competency profile of Tech Prep completers. The competencies on this profile were the basis of the curriculum that was developed.

The project was guided and assisted by the expertise of members of the Technical Advisory Committee, two task forces, and a panel of experts. Inservice was provided for instructional staff on teaching adults and the use of software to develop curriculum materials.

The competency profile for completers of Tech Prep secondary component was developed by Task Force I from a variety of competency lists. Task Force 2 met to identify the competency profile of non-completers of Tech Prep and determined that a large majority of the persons entering the programs or industries represented on TF-2 had mastered few, if any, of the competencies on the completer's profile. Therefor the "gap" between the attainment of these two groups was virtually the whole competency list.

The competency profile of completers of Tech Prep was then used as the basis for competency-based, individualized, self-paced curricula for mathematics and writing courses. The activities in the curricula were developed for the specific needs of the major programs of study available to students at this site. Instructors were trained in the unique needs of adult students and the use of course development software. A management system was developed for tracking individual students through the self-paced process. Also, technical program courses were identified in which students with limited math and writing skills could be successful.

The result of the project is a Bridge Program Quarter that provides concentrated effort to prepare students for college-level work. This quarter enables students to progress through two mathematics courses and two communications courses which move them from basic mathematics to intermediate algebra and from basic writing skills to college-level composition, and prepare them to pass the TASP test. Part of the Bridge Program Quarter will be at least one program course to provide a connection to the profession for which the student is preparing.

The findings and activities of the project were disseminated at a statewide conference in March.

Narrative - Report

Carl D. Perkins grant #44170028 for 1994 FY
Texas State Technical College-East Texas Center, Marshall, Texas

Non-Collegiate-Level Academic and Technical Leveling or Bridge Courses for Tech-Prep Non-Completers

Project Administrator: Dr. John E. Carnes
Project Director: Ann Lewis

FINAL REPORT

PURPOSE

The purpose of this project was to develop and validate a model competency-based, non-collegiate-level curriculum designed to prepare non-Tech Prep students for high-priority, advanced-level Tech Prep programs. This project targeted dislocated workers, high school non-graduates, high school graduates who had not completed the secondary component of a Tech Prep program, and other students who entered college without the fundamental competencies needed to be successful at the college level.

Non-Tech Prep students have widely varying knowledge and skill levels. Many of these students are non-traditional in terms of age, economic status, disability, race, sex, etc. They have multiple demands on their time with responsibilities of families, jobs, and college schedules. To meet their needs, it is imperative that where possible, non-college level bridge courses be open-entry/open exit and self-paced. Through the bridge program, these students can enter advanced level Tech Prep programs at community and technical colleges.

PROJECT IMPLEMENTATION

GOAL I: CREATE AND USE A TECHNICAL ADVISORY COMMITTEE.

Objective I-A: Create the TAC

Technical Advisory Committee, TAC, members were selected with the intent to provide guidance and resource information. The members were selected from Tech Prep practitioners, vocational and technical educators from both secondary and post-secondary levels, business and industry, Quality Work Force Planning, and Councils of Government. The list of TAC members is in Appendix B-1.

Objective I-B: Use the TAC

The TAC met in October 6, 1993 to review the proposal and suggest resources and activities to meet the goals. At this meeting, the TAC determined they preferred written progress reports, to which they could respond, rather than quarterly committee meetings. Progress reports were sent in November, December, March, and April. They included copies of resource materials used by the Task Forces and the Panel of Experts, copies of any documents developed by the Task Forces, evaluations done by the Panel of Experts, and meeting notes, as well as, a report on the activities of the director. A final meeting of the TAC was held in May. Copies of the Quarterly Report to the Texas Higher Education Coordinating Board were sent to TAC members in October, January, April, and July. Copies of these reports are in Appendix A-2.

GOAL II: CONDUCT A DISCREPANCY ANALYSIS OF TECHNICAL, ACADEMIC, AND WORK PLACE BASIC KNOWLEDGE AND SKILLS TO DEVELOP A MODEL NON-COLLEGIATE-LEVEL, COMPETENCY-BASED CURRICULA

Objective II-A: Review Literature

Literature for review was identified through ERIC search and through resources suggested by Tech Prep practitioners, Texas educators, and other contacts throughout the duration of the project. The Project Director was experienced in competency-based, individualized, self-paced instruction at the high school level, but not in the Texas education system nor the recent progress of the Tech Prep program. Therefore, materials chosen for review, and identified in the bibliography, reflect a search for knowledge in those areas.

Objective II-B: Develop a criterion-referenced profile of competency achievement for completers of secondary Tech Prep programs

A Task Force, TF-1, composed of professionals from secondary and post-secondary institutions, adult educators, industrial experts, and Tech Prep practitioners identified the competency profile for completers of secondary Tech Prep programs. A list of Task Force members are in Appendix B-2.

A variety of competency lists were obtained from various sources; i.e. TEA Essential Elements, Vernon Regional Junior College, courseware developers and publishers, and other technical/vocational education institutions; were used as resources to select the competencies to be included in the profile.

The competency profiles were developed for mathematics, communication, and drafting. These profiles were reviewed by the TAC members, business/industry representatives, and instructors of academic and technical programs at TSTC-ETC. Bridge Program instructors who have used the profiles, have further clarified and expanded them into practical, workable documents. These competency profiles are part of the curriculum materials in Appendix E.

Objective II-C: Develop a profile of competency achievement for a typical non-completer of secondary Tech Prep programs

A second Task Force, TF-2, composed of persons representing adult educators, industry persons involved in hiring and training, and post-secondary counselors and developmental studies instructors met to identify the competency profile of students who had not completed the secondary component of Tech Prep. A list of Task Force members are in Appendix B-3.

This Task Force reviewed the competency profile developed by TF-1. The initial response by most members was that persons they take into their courses, programs, or job sites, have mastered few, if any, of the competencies on the profile. After discussion, they held firm to their conviction of the lack of significant competency mastery within the target population. Therefore, the competency profile of noncompleters was virtually blank. Members of both Task Forces stressed the need to teach basic math, writing, and reading skills; that with these skills, workers can learn the technical information needed on the job. Also stressed was the need to consider basic computer skills to be just as fundamental as math and English.

Following the Task Force meeting, and feeling there was more to the picture of incoming students than this finding indicated, some investigation was made by the project staff as to the results of placement tests used by various colleges and the data collected at the state level on the TASP test. According to this data as much as 40 to 60 percent of students entering college are underprepared to work at the college level and have remediation needs ranging from learning or relearning, the basics, to just brushing up on skills previously learned.

Objective II-D: Determine the gap in achievement between completers and non-completers of secondary Tech Prep programs

Activity II-D-1: Compare the competency profile of completers with the competency profile of non-completers.

The proposal called for a Panel of Experts composed of members of both Task Forces to identify competencies where a significant gap exists between the achievement levels for secondary Tech Prep completers and non-completers. This meeting of the Panel of Experts was not held because of TF-2 identified the "gap" as virtually all of the competencies on the profile. This change in grant activities was discussed with the THECB staff member assigned to this grant.

Activity II-D-2: Develop course syllabi for leveling and bridge courses.

Project staff led the Pre-Technical Studies instructional staff at TSTC-ETC in developing and refining the syllabi for courses designed for competency-based, individualized, self-paced instruction of all of the courses in the department. These included: Basic Mathematics, Beginning Algebra, Intermediate Algebra, Occupational Mathematics, Reading Improvement 2 and 3, Writing Skills 1 and 2, and TASP preparation courses.

The Pre-Technical Studies department faculty developed competency-based courses by dividing the competency profile list into courses as described in the Catalog. Performance standards and instructional activities were identified for each competency and Instructional plans aligned to competencies were processed through the use of Course Developer software provided by Doug Goodgame of Ed Tech. Separate competency profiles were identified for each course and used to document the competencies mastered by the end of the course. In these courses, students work individually and at their own pace. Every effort is made to enable the students to complete the course within the time constraints of the quarter term. Those who accelerate through the material, are encouraged to continue into the work of the next course. Those who do not master the competencies identified for the course, are given grades of incomplete and continue their efforts during the next quarter until all are mastered. A change of grade form is then completed and the student gets credit for completing the course. This flexibility allows students who need only to refresh their understanding of the material the opportunity to accelerate the remediation portion of their activities.

Competency-based education as used in the Bridge program, was planned around three major components: First, goal must be known and agreed upon, next, the current status must be identified and accepted, and then the process of attaining mastery and reaching the goal must be clearly, presented and understood.

In building the Bridge Program, these components were considered through the following activities:
The Goal. The goal of the student in the Bridge Program, is success in the technical courses in his/her major program. To customize the Bridge Program for specific core technology programs, the competency profile of completers of Tech Prep secondary programs was reviewed by instructors in the technical programs available at this site. Any competencies not on the profile, identified as important by the instructor for entry level students were added to the competency profile. The ultimate goal of the students is to become employed in the advanced and emerging technology work place. Therefore, input of persons from business and industry was also solicited. Recognizing that incoming students need to experience some link to their personal reason for being in college, the project staff worked closely with technical course instructors to identify program courses students with limited basic skills could successfully undertake. These courses were then linked to the Bridge Program. These program courses, are listed as follows in Appendix E, Math F-1, Writing F-2.

Current Competency Status. The current status of the student's competency profile was determined by pre-tests. Also considered was the student's educational experiences, learning style, and confidence level. Following the pre-test, student/instructor conferences ensured that the student had a clear understanding of his current status and the process necessary to attain the competency profile needed for his choice of program. Technical program areas are currently developing assessment tools to administer to incoming students which will identify students needing remediation prior to entering the program courses.

Path to Attaining Competency Profile. It is important that the student be cognizant of the level of competency required to reach the goal. Many competency-based programs develop learning modules for each competency. Given the constraints of time and resources, it was determined, for this project, to develop a clear path for student through the resources currently available. To accomplish this, the assignment for each competency or group of competencies was clearly identified. The student knew what competency was being taught, on exactly what page, in which text, or which lesson on a computer program, how mastery is to be demonstrated, and what level of mastery is required. Where possible, specific needs of specific programs were considered. For example, the set of competencies for measurement skills will be used in different ways with different programs. Therefore, a different set of measurement assignments and applications was developed for students in each of the six major program options at this site.

To integrate these courses and to provide maximum exposure for students entering college at the lower skill levels, a schedule was developed to immerse the student in the Bridge Program experience.
Our goal is to provide concentrated exposure of sufficient length to ensure learning. These students will attend math and English courses two hours a day, five days a week. Along with the immersion block of courses, students can be registered in at least one major program course from the list of those identified as requiring minimum basic skills. This program is to be implemented in the Fall 1994 quarter.

The project staff has worked with faculty advisors/instructors from all program areas at this site to develop remediation plans for entering remediation students at all levels of basic skills. Faculty advisors have course schedule plans for students entering at three levels of math skills and two levels of English skills. Technical program courses that are at high school level, but earn college credit are included in these schedules. Curriculum resources are in the following appendices: Math F-1, Writing F-2, Reading F-2, Drafting F-3.

GOAL III: FIELD TEST THE MODEL CURRICULUM

The field test, a trial use of the curriculum in the operational setting, was to focus on five aspects of quality: effectiveness, efficiency, acceptability, practicality, and generalizability. Members of the Technical Advisory Committee were surveyed by phone to determine which courses to field test. They chose Beginning Algebra and Writing Skills II.

Objective III-A: Conduct Field Test

The Bridge Program was field tested at TSTC-East Texas Center in Marshall in the Pre-Technical Studies department. The staff of the department included one full-time English instructor, one full-time and one part-time math instructor. The part-time math instructor was also an instructor in the Plant Engineering Technology program. There were some realities of this site that precluded using student progress comparisons for evaluation. The courses in this department have been individualized and self-paced since the institution began classes in the Fall of 1992. Therefore, comparisons of pre-post test results between individualized and traditional classes were not available. Comparison of the relative merits of individualized and traditional modes of delivery was made by instructors who had previously taught in traditional classrooms. The number of students in the field test was limited by the total number enrolled in specific courses. All sections of each course were included in the field test. Because most of these students had previously taken remediation classes here, the student responses may reflect experiences in all classes they had taken in the Pre-Technical Studies department, not just those used for field testing. The major differences in the field test quarter were in the use of competency profiles and improved assignment plans.

Field Test Procedures:

Develop course competency profile.

The first step was to develop course objectives from the competency profile. This process involved courses currently available in the TSTC, Waco/ Marshall, Course Catalog. Competency profiles for math and communications were divided into course sections based upon the Catalog's course descriptions. Each course competency profile was evaluated with the following considerations: all competencies needed for success in major program courses were identified; evaluations made of relevancy to business and industry; and to meet TASP objectives.

Identify resources available.

A matrix was developed to identify the appropriate resources for each competency from the computer lessons and/or texts available. This identified the applicable material on hand and indicated those competencies for which resources still needed to be found.

Develop instructional path.

Assignment Completion Records were developed that clearly state the specific text or computer program, page number, lesson number, and exercises, and/or applications to be completed by the student. Where applicable, these are specific for the major technical program of the student. Course Progress Records are simply a list of units completed and grades earned on unit tests to provide documentation for grade reports. They provide an immediate, current "snap shot" of the students progress through the course.

Evaluate each student's needs, develop individual study plan.

The results of placement tests administered to each student upon entry determined the initial course placement. Within the course, a diagnostic pre-test was given each student to document competencies previously mastered. An individual study plan was developed based on results of the diagnostic pre-test and considering the student's TASP responsibilities. The plans were reviewed with the students and amended where students' information indicated. Each student must be clear as to exactly what was to be expected for this course; ie what competencies were to be mastered and how to proceed to mastery, the preferred time frame, the acceleration or deceleration options available as applicable. The instructors' responsibilities were to facilitate, encourage, prod, and whatever else was needed to maintain the student's progress through the course.

Provide Instruction

The competency profiles for English and mathematics encompass the whole spectrum of competencies for each subject area. Diagnostic pre-tests given the first day of class documented the starting level of mastery and identified the specific competencies needed and thus specific assignments to be completed.

The instruction mode was an individualized, self-paced process through text or computer software assignments designed for the student's specific major program of study. When appropriate, concepts were introduced through lecture, following which, students completed assignments at their own pace, getting help from the instructor as needed. The instructor was a facilitator of learning and worked one-on-one with students as needed. Class size was limited to twenty, to allow sufficient time for personal attention. Upon completion of assignments for the group of competencies that comprise a unit, the unit post test was given.

Students were encouraged to accelerate through the material - or allowed move through it more slowly if necessary. Accelerated students who completed all assignments for the course in which they were registered, were encouraged to continue into the next course in the sequence. Students who required more than the term's expected time frame received an incomplete and continued their efforts the next quarter.

Complete student's personal Competency Profile
This is a seamless Competency Profile for the whole spectrum of competencies for the subject (math or writing). After post-testing by units, each student's personal profile was updated. Post-testing by course was done for the purpose of the field test, but not for competency documentation.

EVALUATIONS

Field Test Evaluation by Focus Areas

The project proposal called for the field test evaluation to focus on the following aspects of quality: effectiveness, efficiency, acceptability, practicality, and generalizability.

Effectiveness

Each student's needs were clearly identified and addressed in an individualized study plan. The students understood the process and proceeded at his own pace through the assignments. This is more effective with the objectiveness of mathematics than it is with the more subjective writing, and reading courses. Instructor survey results support the effectiveness of competency-based, individualized education for the following reasons: effective and efficient use of student's time, decreased fear of failure, acceleration or deceleration possibilities (flexibility), and enhancement of students sense of responsibility toward learning. A significant number of students passed the TASP test on their first attempt after remediation.

Efficiency

This is an especially efficient education delivery mode through which to address the needs of a relatively low number of students with a wide range of remediation needs. It allows students of varying skill levels to be concurrently guided to competency mastery in one classroom. This is especially true for the Basic Mathematic through Beginning Algebra courses, including Occupational Mathematics. It is a labor intensive method of instruction. A low instructor to student ratio is required to permit the individual interactions. However, if retention rates are increased students are more successful in college-level courses, and graduates are better prepared, the efficiency will increase.

Acceptability

The Pre-Technical Studies department at TSTC-East Texas Center was organized on an individualized, self-paced basis at its inception in the Fall of 1992. The department instructors, all new employees this year, successfully adapted to the process. The idea of competency-based education is not clearly understood or accepted by many faculty at the college level, although Tech Prep activities and Carl Perkins grant directives are making them more familiar with it. Students, accustomed to a more spoon-fed approach of having the instructor tell them what they need to know, have to learn to be more self-reliant, taking more responsibility for their own learning. Competency-based practices in the classroom were well-accepted by students just needing to brush up on concepts already learned and by students who were more mature and used to being responsible for themselves. Instructor and student survey results are in Appendix D.

Practicality

Texas State Technical College- East Texas Center at Marshall adapted to the realities of self-paced learning requirements regarding flexible timing. The results of allowing students to master only needed competencies, rather than going over material already learned because it is in the course outline, and of allowing students to work at their own pace, were that some students accelerated through the requirements for the course in which they are registered, others worked through the required material in the usual amount of time, and still others needed more than the weeks defined by the term to complete the course. Students who completed early were encouraged to continue into the next course where possible. Those who did not complete within the term's time frame were given incompletes and were allowed to finish the course the next quarter--or later. For example, one student, for whom learning math is a slow process, has used three quarters to complete the basic mathematics course and will need another three quarters to complete an occupational mathematics course. However, he has done well in the other courses in his program and will have a good understanding of math, and a certificate, where as in a traditional system he would have probably failed and dropped out by the end of the second quarter. There are more incompletes than in a traditional program, with "failures" only for students who did not meet the attendance, and/or effort requirements.

Generalizability

Competency-based, individualized, self-paced learning can be fairly easily instituted in any program willing to take the time to carefully prepare. The mechanics of the process and activities are adaptable...people often are reluctant. Care must be given to prepare for change and for understanding and acceptance of a different instructor/student relationship. Instructors need to have good interpersonal communication skills, be flexible, have a strong sense of responsibility, and excellent organization management skills. The instructor's role is more of a facilitator of learning than an importer of knowledge.

Product Evaluations

The project proposal called for the following product evaluations:
General formative evaluation was by the Technical Advisory Committee. The TAC met in October and reviewed the negotiated budget and evaluated the goals, objectives and activities. TAC members requested written progress reports rather than quarterly meetings. Names of Task Force members and copies of the packet of resources to be used by the task forces were submitted to TAC members and meeting notes of the Task Force meetings were sent to each TAC member. As little feedback was received, positive evaluation was assumed.

Other products were approved as follows, as directed by the proposal:

TAC membership, approved by Project Administrator

Quality and quantity of TAC meetings, approved by Project Administrator, supported by minutes of meetings and progress reports.

Annotated bibliography, approved by Panel of Experts at the meeting on April 13, 1994, and the TAC at the meeting on May 12, 1994.

Competency profile for Tech Prep completers, approved by Panel of Experts and TAC at above named meetings.

Competency profile for non-completers, as determined by Task Force 2, is virtually empty and the "gap" as virtually the entire spectrum of competencies in the completers' profile. This finding was accepted by the Panel of Experts and the TAC.

Field Test procedures, results, conclusions, and recommendations were evaluated by the Project Director. Analysis of pre-post test data indicated significant increase in mastery of basic skills. Competency Profiles of individual students documented mastery of specific competencies. The survey results from students and technical faculty were positive, and the responses of the Pre-Technical Studies' instructors supported continuance of the competency-based, individualized, self-paced instructional mode for the courses tested. Survey responses and instructor responses are in Appendix D.

Statewide dissemination was accomplished at a Presentation at the Texas State Tech-Prep conference on March 30. 1994. Participant survey responses indicated satisfactory responses. Presentation outline and survey results are in Appendix C-1.

Results

Through the efforts of this project, competency profiles that reflect attainments of persons who have completed the secondary component of Tech Prep have been identified for mathematics, writing, reading, and

drafting. Curricula was developed to address the mathematics and writing needs of students who have not mastered these competencies. Integration activities with instructors of technical courses resulted in assignments and activities in these courses tailored to meet the competency requirements for the specific program of study the student has chosen. Competency-based, individualized materials were developed for Basic Mathematics. Beginning Algebra, Introductory Algebra, Intermediate Algebra, Mathematics, Writing Skills I, and Writing Skills II. Competencies were established and some curriculum development was done for reading and drafting.
These materials are in Appendix F.

Recognizing the need for a quarter dedicated to basic skills improvement, a new configuration of courses will be offered 1994 Fall Quarter. This Bridge Program Quarter will provide a daily sustained effort to remediate the lower level students. It is designed to immerse them in mathematics and communication skill building activities for four hours daily. In response to the recommendations of business and industry, a beginning keyboarding course will be part of this remediation core.

Realizing the need for students to be working toward and involved in their chosen program, cooperative efforts with instructors of technical courses identified courses in each program that could be successfully undertaken by students with limited math and/or communication skills. This has resulted in scheduling packets for faculty advisors to enable them to better advise underprepared students and to enhance the student's opportunity for success. These courses, along with the remediation courses taken through immersion or the regular schedule, comprise the Bridge Program Quarter. Bridge Program information is in Appendix E.

Conclusions

Competency-based, individualized, self-paced learning is especially compatible with remediation activities at the college level. It recognizes the uniqueness of each student and accepts him as he is and helps him to go on with dignity. The personal attention available to each student helps to overcome fear and embarrassment and fosters advancement. It is helpful for those who are able to accelerate as they recall concepts previously learned. More rewarding, it provides the student who must re-learn expanded time and attention necessary for success. Competency-based learning is especially effective for re-entry students, men and women who are returning to college for various reasons. Often layoff or divorce adds to their concerns and impacts their powers of concentration. These students are keenly aware of their lack of skills and the need for these skills in the work place. They accept the need for remediation and are willing to give time and personal attention to the effort.

Difficulties

The difficulties that occurred centered around those students most recently out of high school, who do not, as yet, fully accept their personal responsibility for their education. They come from a system where the teacher tell them what they need to know so they are not adept at learning. These students often do not use their time wisely because they see no immediate repercussions to their lack of progress. When they do not learn the expected material, they report it is because the instructor did not present it in a lecture. Older students, especially those who have been in the work force, more readily accept the responsibility for learning and understand the need to know.

Print and media resources are readily available; more difficult to find are activities to demonstrate application of knowledge. This will be the focus of the Pre-Technical Studies department's continuing effort to build the Bridge Program. The required concepts do not vary much from one technical program to another, but the ways in which the concepts are used differ considerably. Students, especially those with low basic skills, need to know the "why" of what they are trying to learn to be able to better grasp the "what".

III-B: Conduct a Statewide Dissemination Workshop

The decision was made in consultation with the TAC to have the dissemination workshop at the statewide Tech Prep practitioners conference. The Tech Prep - Texas State Conference was held March 28-30 in San Antonio. The Bridge to Technology presentation was at 8:30am to 9:30pm on Wednesday, March 30 to 35-40 attendees. The following areas of the project were covered:

An overview of the grant project
Explanation of the process used to identify the competencies.
Overview of competency-based education
Development of courses from list of competencies
Management system for student progress records.

The presentation evaluation survey indicated the following responses by those in attendance. On a rating scale of 1 being highest and 5 being lowest rating, these responses resulted:

1. The presentation was well organized. Avg. 2.4
2. The information presented was concise and understandable. Avg. 2.5
3. The handouts were pertinent and helpful. Avg. 1.8
4. Your program can use this information. Avg. 2.1

Half of the written comments received indicated it was difficult to hear because of the noise level from the adjoining room and the lack of a microphone. Half of the remaining comments reflected negative response to information being read to them. The presentation had opened with a reading of an overview of the Tech Prep program at the college site. Presentation outline and survey results are in Appendix C.

Recommendations

Go for it. It's worth the effort. Competency-based, individualized, self-paced education is one of the most effective ways to help people rebuild their basic skills.

This mode of delivery is different and does not fit the picture people have of how "school" is to be from their own personal experiences. Therefore, these recommendation are offered:

> Prepare for change. Recognize the differences and accept that preparation is needed. Involve all the stakeholders in the change process: instructors, faculty advisors, lab assistants, administrators, students, etc.
>
> Spend some time with the stakeholders determining exactly what they need/want to do, then work toward a curriculum plan you can adapt to fit their needs.
>
> Develop institution-wide support of the effort. Educate the faculty to the idea and the processes. Their understanding is necessary for their acceptance of the Bridge Program as an important and integral part of their own programs.

The realities of today's incoming students' lack of basic skills and knowledge mandates an effective remediation program for the continued success of the college. Give the remediation program, whether it be the Bridge Program or another process, the attention, support and respect due a department charged with preparing students to learn at the college level. Back-up the efforts of the remediation department to maintain high levels of competency for advancement into college courses. The more effective the remediation program is, the more ready the student is to learn. This should result in better prepared students and higher retention rates, graduates, and enhance the institution's ability to provide workers prepared for the emerging advanced, high-tech jobs that industry offers.

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Dill, Vicky Schrelber. Closing the Gap: Acceleration vs Remediation and the Impact of Retention in Grade on Student Achievement. Texas Education Agency, Austin, Texas, 1993. Essence of accelerated instruction programs is that they set clear goals, assess regularly, build on strength, use cooperative learning, peer tutoring and community resources to enable continuous learning that provides timely feedback and results in a sense of improvement for the student.

Fulghum, Robert. Uh Oh Some Observations From Both Refrigerator Doors. Random House, 1991. A book on the celebration of life with a balance between the mundane and the holy; between humor and grief, and between what is and what might be.

Handbook for Administrators. Central Texas Tech-Prep Consortium, Temple, Texas, 1991. The creation of this document was initiated by the professional development committee in 1991 and will be updated in 1995.

Hinds, Joyce. Prerequisite Skills for Post Secondary Vocational Programs. Vernon Junior College, Vernon, Texas, 1988. List of necessary skills in math, written language use, and reading for specific vocational programs. Tables of results that were compiled from survey responses from 59 two-year colleges. 817-552-6291.

Hull, Dan and Parnell, Dale. Tech Prep Associate Degree: A Win / Win Experience. Center for Occupational Research and Development, Waco, Texas, 1991. Tech-Prep Associate Degree Program. Documents the need to prepare for dealing with inadequate basic-skills for adults who re-enter formal education or training programs.

Kenyon, Robert; Clark, Karen and Nira-Shahen, Margie. What Work Requires of Schools. Executive Summary, US Department of Labor, Washington, DC, 1991.

*Mattews, Pamela E. Integrating Tech-Prep and Academic Curriculum. Texas Tech-Prep Consortium, Waco, Texas, 1993. Centered around the teaching of mathematics in high school. Challenges the effectiveness and validity of packaging high school learning into discrete subjects, due to the growing connections among mathematical topics and the connections of mathematics with all other fields. Pamela Matthews is the Associate Dean of the Mathematics Division, Mt. Hood Community College, Gresham, Oregan. 503-667-6422.

McClaran, Nancy Dr. Scarcity or Abundance? The ASCD Texas 1993-94 Conference. The key word is proficiency. We need to examine what we do with the students we have, not what we do with the hours we have.

Miller, John E. Learning to Work:Making the Business and Industry Connection for Tech-Prep Programs. Texas State Technical College-East Texas Center, Marshall, Texas, 1994. A manual of strategic techniques and resources for developing advanced skills courses at community and technical colleges.

Nobles, Diane. Learning to Work: Career Pathway. Texas State Technical College-East Texas Center, Marshall, Texas 1994. A counselors guide to Tech-Prep in manufacturing Technologies.

Parnell, Dale. The Neglected Majority. Community College Press, Washington DC, 1985. Emphasizes the need for integration of learning with work, leisure time, citizenship "across life's experience as well as throughout life's adventure." Points out necessity of meeting the student at the point of his or her "learner" needs. Proposes strategies of coordination and cooperation between high schools and colleges that evolved into the Tech-Prep program. Dale Parnell is currently a professor of English at Oregan State University, Corvallis, Oregan. 503-737-0123.

*Project Synergy: Software-Support for Underprepared Students. Year Three Report. Miami-Dade Community College, Miami, 1993. Development of a system for researching, evaluating, and integrating computer software to raise basic skills levels. Identifies competency lists for mathematics, reading, and writing. Teachers of remediation classes nationwide evaluated software in use as to instructional mode, the topics, content attributes, meeting faculty needs, meeting student needs, and attributes of software implementation (1990-1994). In process of developing an integrated computerized management system using an holistic approach (1992-1997). Also developing bank of items for mastery testing. Addresses process of change needed to develop environment for computer-based learning that requires instructors to focus more on learning than teaching, to think of individual students rather than groups of students, to perceive themselves as facilitators of learning rather than givers of information. Reviews available on Internet through IKE. The project Synergy data base, called PS^3 is available on IKE (IBM Kiosk for Education), an electronic bulletin board and

database developed and operated by the University of Washington accessable and accusable by Internet. For further information call the ISAAC office at (206)543-5604 between 8am and 4:30pm. Pacific time, or via E-mail at ike@ike.engr.washington.edu, or write to ISAAC Access, m/s FC-06, U of W, Seattle, Wa, 98195. If you access IKE and would like to see the projects software reviews, choose DATABASES at the main menu. Then choose Software Reviews(Project Synergy) then type in one or more search words. Miami-Dade Community College, Division of Educational Technologies, 11011 SW 104 Street, Miami, FL 33176. 305-237-2551.

Tech-Prep in Texas. General overview of Tech-Prep State Plan Guidelines that detail expectation of TP programs. Factors to consider and steps to be taken in developing programs. Directs the development of performances standards for both secondary and post secondary levels. Identifies academic and occupational skill levels of Tech-Prep completers.

Texas Department of Commerce. Texas Skills Development Program. Report to the governor. Austin, Texas: Texas Department of Commerce, August, 1993. Workplace skills framed by measurable standards are reflected in curricula of education and training centers. These standards include SCANS, industry identified CORE skills standards, and academic competencies that are identified through consensus and partnership of business, industry, labor, and education. 512-472-5059.

Texas Higher Education Coordinating Board. Performance Measures and Core Standards for Post-Secondary Technical Education. Austin, Texas: Texas Higher Education Coordinating Board, September, 1992. Establishes expectations for who will be served and expected outcomes but leaves determination of methodology to education providers. Goal is to provide greater flexibility in program design and methodology, but issue a strong mandate to "make it work" for the clients. 512-483-6444 or 512-483-6250.

Texas Higher Education Coordinating Board. Technical Education Programs Guidelines. Austin, Texas: Texas Higher Education Coordinating Board, April, 1993. Provides guidelines for the design and development of new programs and process for revising currently approved programs. Requires that all currently approved programs be revised to meet these guidelines by January, 1995. Includes faculty qualifications, professional development plans, flexible and innovative approaches to delivery of competency-based instruction as well as details on credit hours and program\degree requirements. 512-483-6250.

Texas State Board of Education. The Master Plan for Career and Technical Education. Austin, Texas: Texas State Board of Education, 1993. Lists goals, objectives and strategies, identifies responsible agency and time lines for career and technical education that emphasize the seamless nature of career and technical education among the diverse levels of technical education. To be used to develop or update long range strategic plans and institutional self assessment. 512-463-9734.

*Thurow, Lester. Professor of Education and Management at Sloan School of Management (MIT). Speech at Business for Social Responsibility Conference. October, 1993. The changing picture of world economics-emphasize the need to turnout people at the lowest level of the workplace whose education and skills are at least as good as the rest of the world. Stresses setting a standard for education and sticking to it.

*Travis, Eugenia Dr. Competency-Based Instruction Workshop Participant Handbook. Northeast Texas Community College, Mt. Pleasant, Texas, 1992. Outstanding resource for the organization, details, and procedures needed to implement competency-based educational delivery system. Developed for vocational education, but adaptable for integrated programs. 903-752-1911.

Tri-Agency Partnership. Tech Prep High School and Associate of Applied Science Degree Programs. Austin, Texas: Tri-Agency Partnership, 1992. Guidelines for development and implementation of Tech-Prep programs. Addresses the specific requirements currently required for the cooperative development and implementation of these programs that enable state recognition and funding.

U.S. Department of Labor. Secretaries Commission on Achieving Necessary Skills (SCANS). June, 1991. Identifies the foundation skills and competencies required for workplace employees and emphasize need for incorporation of these competencies into all courses taught. 202-219-8702.

U.S. Dept. of Labor. Work-Based Learning:Training America's Workers. A report prepared under direction of Bureau of Apprenticeship and Training-Basic literacy skills for continued learning are necessary to prepare for technological changes that require higher skills and more adaptability. 202-219-8702.

***Highly Recommended**

Appendix

APPENDIX

TABLE OF CONTENTS

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Abstract Reports

TEXAS HIGHER EDUCATION COORDINATING BOARD
GRANT APPLICATION
PROGRAM YEAR 1993 - 1994

ABSTRACT PAGE

CB Category: **TECH-PREP, Category 1700-D, Non-collegiate-level academic and technical leveling or bridge courses for Tech-Prep non-completers.**

Facilitator: Texas State Technical College--East Texas Center at Marshall (TSTC-ETC).

Funding: 75,000.

Staffing: Full-time project director and half-time project secretary.

Our educational system at all levels has been criticized by government, business, and industry leaders for producing graduates that lack the knowledge and skills required in today's workplace. The workplace not only requires technical skills. The workplace requires greater knowledge of academic subject matter (English, science, and mathematics) and workplace basic skills (SCANS and TQM) as well.

The Tech-Prep initiative has great potential for providing workplace relevant knowledge and skills to both secondary and postsecondary graduates. Tech-prep, however, lacks a model competency-based curriculum targeting displaced workers, high school non-completers, and high school graduates not completing a Tech-Prep sequence of courses. Such a model curriculum is needed to prepare non-Tech-Prep students for entry into high-priority, advanced-level Tech-Prep programs at community and technical colleges.

The purpose, therefore, of the proposed project is to develop and validate a model competency-based, non-collegiate-level curriculum designed to prepare non-Tech-Prep students for high-priority, advanced-level Tech-Prep programs.

Goal I: Create and use a technical advisory committee (TAC) composed of: (a) vocational-technical administrators, counselors, and instructors from both local education agencies (LEAs) and postsecondary institutions (PSIs), and (b) representatives of councils of government (COGs), business, and industry.

Goal II: Conduct a discrepancy analysis of technical, academic, and workplace basic knowledge and skills to develop a model non-collegiate-level, competency-based curricula to bridge the gap between Tech-Prep non-completers and the entry requirements of high-priority, advanced-level Tech-Prep programs at community and technical colleges

Goal III: Field test the model curriculum to determine appropriateness of selected curriculum resources and make recommendations for further development.

The proposed project will be conducted in conjunction with the Deep East Texas, East Texas, Northeast Texas Tech-Prep Consortia, Quality Work Force Planning Committees, and Councils of Government, and the Texas Employment Commission. The project results will be disseminated statewide. If the proposed project is funded, TSTC-ETC at Marshall will provide up to $50,000 for curriculum resources selected for field testing.

1st QUARTER REPORT

Institution Name: Texas State Technical College
East Texas Center, Marshall

Project Name: Collegiate-Level Academic and Technical Leveling or
Bridge Courses for Tech-Prep Non-Completers Project #44170028
Fice Code: 003634 Appropriation: $ 73,3000

1. An advisory committee meeting is required no later than the first quarter and as needed to meet the goals of the project. Please provide the date of Advisory Committee Meeting(s) during the current quarter.

   The Technical Advisory Committee met on Oct. 6, 1993

2. Comment on the project's progress (to date) on the achievement of goals/objectives in terms of the stated performance measures (Refer to Operational format, Part F).

   Goal I: TAC formed and meet--completed
   Goal II, Objective II--A Literature review--continuing
   Objective II-B Competency profile of TP Completers--in process
   Objective II-C Competency profile of Non-Completes--just begun

3. Identify anticipated goals/objectives not achieved during the current quarter.

   Goal II, Objectives II-B was to have been completed by end of third month.
   Projected completion- end of fourth month.

4. List any problems or obstacles to successful completion of the project which were identified during this quarter.

   Not a problem--a suggested change of focus emerged from discussions at TAC meeting Instead of focusing on development of extended syllabi for courses, it would be more useful to focus on identification of gap in competencies of completers to that of non-completers of Tech-Prep and creation of a process to aid others in developing/adapting courses to address the identified gap. This would result in extended syllabi for 2 courses rather than "courses".

5. Describe how the problems or obstacles are being addressed.

   By concentrating more effort on development of gap identification.

6. Describe assistance requested from Staff Advisor and /or Federal Projects staff.

   Staff Advisor, Mr. Ron Curry, attended the TAC meeting on 10-6-93.
   He contributed ideas, suggested resources, and helped to clarify goals.

Ann Lewis
Project Director

Oct. 15, 1993
Date

Grant Contact Person

10-15-93
Date

PLEASE FORWARD THIS REPORT BY __________ TO PROJECT ADVISOR. ATTACH COPY OF THE MINUTES OF ANY ADVISORY COMMITTEE MEETINGS WHICH WERE HELD DURING THE QUARTER.

2nd QUARTER REPORT

Institution Name: **Texas State Technical College**
East Texas Center, Marshall

Project Name: **Collegiate-Level Academic and Technical Leveling or Bridge Courses for Tech-Prep Non-Completers** Project #**44170028**
Fice Code: **003634** Appropriation: $ **73,300.00**

1. An advisory committee meeting is required no later than the first quarter and as needed to meet the goals of the project. Please provide the date of Advisory Committee Meeting(s) during the current quarter.
   The Technical Advisory Committee requested, in lieu of meetings, regular written updates on activities to which they would respond. Updates mailed to TAC members in November and December.

2. Comment on the project's progress (to date) on the achievement of goals/objectives in terms of the stated performance measures (Refer to Operational format, Part F).
   Obj. I Tech. Adv. Com. complete.
   Obj. IIa literature search, continuing.
   Obj. II.b&c Competency Profiles, Completer and Non-Completer complete
   Obj. IId gap in competency profiles identified.

3. Identify anticipated goals/objectives not achieved during the current quarter.
   Second quarter goals and objectives were met.

4. List any problems or obstacles to successful completion of the project which were identified during this quarter.
   Panel of experts comprised of both Task Forces was to meet Jan. 26 to identify the gap between completers and non-completers competency profiles. The Non-Completers Task Force determined entry-level students/workers have few, if any, of the listed competencies. Thus the gap was identified as the entire completer's competency profile. I feel the non-completer's profile can be more clearly defined.

5. Describe how the problems or obstacles are being addressed.
   The TAC was informed of the stated problem in an update and will consider this at the 3rd quarter meeting. I am currently researching placement tests at technical and community colleges and JTPA programs to identify statistical information for possible use in clarifying this gap.

6. Describe assistance requested from Staff Advisor and /or Federal Projects staff.
   Requested of Ron Curry:
   1. authorization to move some money from project directors salary to that of clerk to enable hiring clerk full time for 3/4 of the project year. Approved
   2. authorization to postpone Panel of Experts meeting until after TAC has met. Approved

Ann Lewis
Project Director

1-13-94
Date

Grant Contact Person

Date

PLEASE FORWARD THIS REPORT BY **Jan. 17, 1994** TO PROJECT ADVISOR. ATTACH COPY OF THE MINUTES OF ANY ADVISORY COMMITTEE MEETINGS WHICH WERE HELD DURING THE QUARTER.

3rd QUARTER REPORT

Institution Name: Texas State Technical College
East Texas Center, Marshall

Project Name: Collegiate-Level Academic and Technical Leveling or Bridge Courses for Tech-Prep Non-Completers Project #44170028
Fice Code: 003634 Appropriation: $ 73,300.00

1. An advisory committee meeting is required no later than the first quarter and as needed to meet the goals of the project. Please provide the date of Advisory Committee Meeting(s) during the current quarter.
The Technical Advisory Committee requested, in lieu of meetings, regular written updates on activities to which they would respond, Up date was mailed in early March.

2. Comment on the project's progress (to date) on the achievement of goals/objectives in terms of the stated performance measures (Refer to Operational format, Part F).
Obj. 1, TAC, complete
Obj. IIa literature search, search completed, bibliography in process
Obj, II.b&c Competency Profiles, complete
Obj. II.d Gap identified, completed
Obj. III.a Field Testing, in process
Obj. III.b Statewide workshop, completed

3. Identify anticipated goals/objectives not achieved during the current quarter.
Third quarter goals and objectives were met.

4. List any problems or obstacles to successful completion of the project which were identified during this quarter.
No significant problems or obstacles were identified during this quarter

5. Describe how the problems or obstacles are being addressed.

6. Describe assistance requested from Staff Advisor and /or Federal Projects staff.
I requested and received authorization to reallocate budget monies to allow for trips to Tech-Prep meetings and for purchase of instructional software.

Elizabeth Ann Lewis
Project Director

4-15-94
Date

Grant Contact Person

Date

PLEASE FORWARD THIS REPORT BY ____ TO PROJECT ADVISOR. ATTACH COPY OF THE MINUTES OF ANY ADVISORY COMMITTEE MEETINGS WHICH WERE HELD DURING THE QUARTER.

4th QUARTER REPORT

Institution Name: **Texas State Technical College**
East Texas Center, Marshall

Project Name: **Collegiate-Level Academic and Technical Leveling or Bridge Courses for Tech-Prep Non-Completers** Project #**44170028**
Fice Code: **003634** Appropriation: $ **73,300.00**

1. An advisory committee meeting is required no later than the first quarter and as needed to meet the goals of the project. Please provide the date of Advisory Committee Meeting(s) during the current quarter.
   Technical Advisory Committee met on May 12. Products to be evaluated were discussed and evaluated.

2. Comment on the project's progress (to date) on the achievement of goals/objectives in terms of the stated performance measures (Refer to Operational format, Part F).
   Obj I: TAC complete
   Obj IIa: Bibliography, complete
   Obj IIb&c: Competency Profiles, complete
   Obj IId-1: Gap identified
   Obj IId-2: Syllabi, complete
   Obj IIIa: Field Test, complete
   Obj IIIb: Statewide workshop, complete

3. Identify anticipated goals/objectives not achieved during the current quarter.
   Fourth quarter goals and objectives were met.

4. List any problems or obstacles to successful completion of the project which were identified during this quarter.
   No problems or obstacles were identified during this quarter

5. Describe how the problems or obstacles are being addressed.

6. Describe assistance requested from Staff Advisor and /or Federal Projects staff.
   I requested and received authorization to reallocate budget monies to allow for efficient and effective use of remaining funds

Ann Lewis
Project Director

7-6-94
Date

Grant Contact Person

7/6/94 7-8-94
Date

PLEASE FORWARD THIS REPORT BY____TO PROJECT ADVISOR. ATTACH COPY OF THE MINUTES OF ANY ADVISORY COMMITTEE MEETINGS WHICH WERE HELD DURING THE QUARTER.

Technical Advisory Committee
Task Forces
Meetings

TECHNICAL ADVISORY COMMITTEE

Mr. Ron Curry
Coordinating Board
Tech Prep Program Director and State Coordinator
Community and Technical Colleges
P.O. Box 12788
Austin, TX 78711
512-483-6250 FX 483-6444

Dr. Carliss Hyde
Dean of General Studies
TSTC Waco
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Waco, TX 76705
800-792-8784

Mrs. Doris Sharp
Tech Prep Director
East Texas Consortium
University of Texas at Tyler
3900 University boulevard
Tyler, Texas 75799
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Mr. Walter York
Quality Work Force Planning
Northeast Texas Community College
P.O. Box 1307
Mt. Pleasant, TX 75455
903-572-1911 FX 572-6712

Dr. Barry Russell
Project Director
Central Texas Tech Prep Consortium
2600 South first Street
Temple, TX 76504
817-773-9961 x313 FX 773-7043

Dr. Cassy Key, Director
Capital Area Tech Prep Consortium
5930 Middle Fiskville Road
Austin, TX 78752
512-483-7720 or 7825 FX 483-7786

Dr. Carrie H. Nelson
Tech Prep Director
Division of Technical-Vocational Education
Angelina College
P.O. Box 1769
Lufkin, TX 75902-1768
409-633-5246 FX 639-4299

TAC

Mrs. Sue Bell
Tyler Independent School Dist.
P.O. Box 2035
Tyler, TX 75710
903-531-3500

Mr. Harold Cornish
President, Marshall Chamber of Commerce
(Former CEO)
101 Cedar Circle
Marshall, TX 75671
903-938-6205

Dr. Vicki Oglesby
Dean of Applied Technology
Paris Junior College
2400 Clarksville St.
Paris, TX 75406
903-784-9381 FX 784-9378

Mr. Wendell Holcombe
East Texas Council of Governments
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Kilgore, TX 75663
903-984-8641

Ms. Jo Huffman
Curriculum Coordinator
Deep East Texas Tech-Prep Consortium
PO Box 1768
Lufkin, TX 75902
409-633-5307 FX 639-4299

TECHNICAL ADVISORY COMMITTEE

AGENDA
October 6, 1993

Materials needed:

- List of Committee members
- Project Outline
- Extra copies of first 22 pages of proposal

Introductions
- John Carnes
- Ann Lewis
  - Pertinient background information
- Committee members (distribute list)
  - Correct any erroneous information on list
  - Any additions recommended?

Overview of Project
- Form Technical Advisory Committee
- Conduct discrepancy analysis
  - Literture search
  - Tech-Prep Completer's profile
  - Non-completer of Tech-Prep profile
  - Identify gaps
- Develop course curriculm
  - Design course syllabi
  - Determine courses to develop
  - Develop selected courses
- Field Test
- Disemminate findings (ststewide)

Completed
- TAC identified

In Progress
- Literature search
- Identification of other resources (persons/places)

TECH-PREP BRIDGE PROJECT

TECHNICAL ADVISORY COMMITTEE
Meeting Notes

10-06-93
South Padre Island

The following adaptations, suggestions, changes were recommended at this meeting of the TAC:

Definitions:
Competency-Based: Recognize that in some cases, though self-paced, individualized delivery system is desirable, the constraints of semester and quarter systems impose end time considerations.

Non-collegiate: Use term "Bridge" and define it. Courses may be "non-collegiate", but result in credits not to be counted toward a degree.

High Priority approved, post secondary level Tech-Prep Programs: defined as post secondary portion of Tech-Prep educational plans.

Education plan includes attention to barriers, such as child care and transportation, and counseling needs. (Student services)

In addition to developmental courses, include for consideration those courses such as Principles of Technology that have been added at the high school level and were not available to students in high school earlier.

TAC
TAC Members

Add: Jo Huffman
Curriculum Coordinator
Deep East Texas Tech-Prep Consortium
PO Box 1768
Lufkin, TX 75902
409-633-5307 FX 639-4299

Resource Persons
Task forces possibilities etc.
Seek out doers instead of writers.

Sandra Evert; Loraine, Ohio. Has created Bridge program for dislocated workers.
CORD helped Alabama with Bridge program. "Transformations"
David England; McLennans CC, VP of Research and Development. Dissertation on Bridge courses.
Kay Grasby; Greenwood Tech, SC. Tech transfer and Pre-Tech. Works with industry training and retraining.

T J Aspland: (Tech-Prep high school grad) Has been promoted several times. Not time to go on to college.
JTPA teacher from exemplary program. Check with TJC
Dr. Linda Watkins, ABE and Aubrey Sharp, JTPA
Jan S (?) and Al Dias; Temple CC, Silver Bridge (name of program may have changed.
Wesley Campbell; TJC
Frank Mitten; Crocket, developmental algebra
Barbara Flornoy; Angleina College, reading specialist
Kathy Gillispi; Austin
Stan Addleman; Amarillo College

Re future TAC meetings. Prefer frequent updates in writing to which can respond via phone or fax. Interaction without formal meetings.

Literature Review: Look for doers not writers--in industry, military, labor. (review material and contacts from last Fall in pursuit of JSEP) B. Russell has contact at Ft. Hood.

COMPLETER PROFILE
Information resources
Association of Building Contractors has national competency based courses.
Check on exit exams or competency lists
Skills certifications, Dept. exams
TASP Objectives and skills
TSTC Sweetwater--End of high school test for competency-based program. Computer applications exams
Challenge exams for tech occupation courses
Read the 30 reports (TP?) for commonalities of curriculum--go into specific curriculum areas such as electronics.
B. Russell coordination JTPA/GED/ABE bridges--goal Dec. 13

NON-COMPLETERS PROFILE
Establish entry level points and referral systems for those not at entry level. (JTPA, GED, Literacy)
Tap teaching knowledge of DVS instructors.
Ask of business and industry what is it about non-completers that makes them unemployable.
Identify range of profile, them identify part of range to be addressed by this project. (see first item in this section)
Phone survey of TP Directors (25) to determining who has Bridge programs already in place or forming one.
Compare entry placement testing at CC/TC...Amarillo TSTC, Amarillo College (Stan Addleman, researcher at AC.)

TASK FORCES
50% from business and industry. Seek persons who could describe

prospective employees that would be valued by employers. Look at all aspects of industry.

When hold meetings, be careful all persons feel their ideas are valued. Persons with more education or "presence" can easily intimidate others.

ASTD studies, work-place basics

IDENTIFY GAP

Chart: Vision (completer) Status (non-completer) Gap Action Timeline

Assessment important--include work experience evaluation by employer--applied tasks--course exams.

Panel of Experts: invite everyone on task forces

COURSES

Have work-based learning component

Computer skills specific to program--Word Perfect not best for all.

Not end up with just a rehash of currently used courses
Implementation may be 2-3 years down the road

Define Tech-Prep Bridge to give Tech-Prep something to give to community colleges to take to support agencies.

Consider need for "quick" reading comprehension upgrade.

Concerns

Professional Development for CC/TC instructors in SCANS, Applied learning, etc.

Deans to identify PD needs, encourage/require staff to participate

END RESULTS

Look for ways to market product to fund continued efforts.

Coorelate, fold-in, with School-To-Work ideas.

Colleges want something to take to Coordinating Board to support course funding requests.

Student and instructors evaluate courses two years after start-up.

FOCUS

A model to develop courses linked to competency statements and levels.

Generate general average competency differences.

Expanded syllabi (syllabi to delivery system) for 1-2 specific programs.

Each Tech-Prep Consortium should be able o take the identified competency gap and use it to evaluate, adapt, develop their own courses.

DISSEMINATION

Progress report at Spring meeting.
School-to-work/Tech-Prep meetings
Consider brochure and video.

TECHNICAL ADVISORY COMMITTEE
C. PERKINS DISCRETIONARY GRANT: BRIDGE PROGRAM
May 12, 1994

Meeting Agenda

"The TAC will meet a total of four times, The initial meeting will provide approval of negotiated budgets, goals, objectives, and activities.

The overall goal of this first meeting is project installation."

Met on October 6, 1993 at Corpus Christi

"The second and third meetings will involve the TAC in approval of all project participants and processes (formative evaluation)."

Decision at time of initial TAC meeting was to have the Project Director mail written progress reports to each TAC member. TAC members would then send to the Project Director their comments, suggestions, recommendations. Progress reports were sent on October 11, February 5, April 15, and copies of official Quarterly Reports on October 15, January 15, and April 15.

"The fourth meeting will seek TAC input concerning the project products (summative evaluation)."

At the conclusion of the project period, the TAC will make recommendations for the future including need to seek continuation funding.

Evaluation Plan To be considered today:

TAC listed as evaluator of:

1. Annotated Bibliography. Quantitive review

2. Competency profile for completers. Quatitive review

3. Profile of competency achievement for a typical non-completer. Quantitative review.

4, Competencies where a gap exists between the two groups. Quantitative review.

Field Testing

Competency Profiles: Reading, Writing, Mathematics, Drafting

Resource Lists

Course materials
Syllabi
Goals and objectives
Course outline
Performance Standards

Project Product

Two copies of each product draft must be provided to the Coordinating Board by **February 7, 1994** for approval prior to printing the final project. After approval, the contractor must submit twenty copies of the final product(s)

Propose developing a "how to" book describing the process involved in creating this Bridge Program.

Final Report

The final report will include a one -page executive summary and a detailed narrative report describing activities and accomplishments. Ten copies of the final report must be provided to the Coordinating Board by August 15, 1994. Also due with the final report are any products or processes described as deliverable in the contract. This report will include data from July 1, 1993 through June 30, 1994

TSTC-ETC/TECH PREP BRIDGE PROJECT

COMPLETERS TASK FORCE

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Maurice Warren
Instructor, Industrial Maintenance Mechanics
TSTC East Texas Center
PO Box 1269

Marshall. TX 75671

Clyde Ford
Tech. Instructor
TSTC east Texas Center
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Marshall, TX 75671

Richard Smith
Physical Science Instructor
Robert E. Lee High School
Tyler, TX
903-531-6164

Task Force Confirmation

Dear

I appreaciate very much your willingness to help with the Task Force for identifying the competency profile of completers of secondary component of Tech Prep. This Task force will meet twice. The first meeting will be on November 18, 1993 at the University of Texas in Tyler, in room 423 of the Muntz Library, from 9am to 4pm. Enclosed you will find a map UT Tyler.

Another Task Force will meet in December to compile a profile of non-completers of secondary Tech Prep programs. The two Task Forces in the grant will meet together as a Panel of Experts in January. The date and place of this meeting is not yet determined.

A summary of parts of the grant proposalis and a complilation of competencies are also included in this packet. The grant summary will give you a clearer picture of the project and where your fit into the total project.

Task Force - Completers
November 18, 1993
At UT Tyler, Muntz Library

Agenda

Take:
Packets of lists
Copies of summary

Introductions

Summary of Project Activities

Competencies:
    define
    generic or more difinitive

Tech-Prep Six year plan

Process:
    Review Essential Elements
    Review available competency lists
    Brainstorm a list of competencies
    Organize / expand / simplify

December 21, 1993

Richard Smith
Physical Science Instructor
Robert E. Lee High School
411 East SW Loop 323
Tyler, TX 75701

Dear Mr. Smith:

These are the competency profiles for mathematics, communications, and drafting that were developed by the Task Force of which you were a part. Please review these lists carefully and determine if there are items to be added, items you feel should be deleted, any changes needed in the way competencies are stated- anything you think will improve these competency profiles. Mark any suggested changes on the pages I have sent and return them to me by Jan. 10, if possible.

Thank you again for sharing your time and expertise with this Task Force. I am looking forward to seeing you at the Panel of Experts meeting in Jan. 26.

Sincerely,

Ann Lewis, Director
Tech-Prep Bridge Project

nr
Enclosure

Texas State
Technical Colleg
East Texas Center at Marsha

2615 EAST END BLVD. SO
MARSHALL, TEXAS 75670

P.O. BOX 1269
MARSHALL, TEXAS 75671
903/935-1010
FAX: 903/935-[illegible]

November 23, 1993

Mr. Bill Denson
STEMCO INC
P.O. Box 1989
Longview, TX 75606

Dear Mr. Denson

I want to thank you for your participation in the Task Force that met in Tyler last Thursday. Your willingness to give of your time and share your knowledge and ideas is much appreciated. The competencies you helped to identify will be compiled and you will be sent a copy of the ones you worked with. I welcome any further additions or changes you may want to suggest at that time.

I am looking forward to the joint meeting of the two Task Forces as a Panel of Experts on January 26, 1994. This meeting will be to look at the results of the previous activities and identify the gap in the competencies attained by completers and non-completers of the Tech Prep secondary component.

Sincerely,

Ann Lewis

TASK FORCE 2
NON-COMPLETERS

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Claudia Henderson
Trainging Administrator
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P.O. Box 1000
Lone Star, TX 75668
903-656-6834 FX 656-6303

December 2, 1993

Ms. Jo Huffman
Deep East Texas Tech-Prep Consortium
P.O. Box 1768
Lufkin, TX 75902

Dear Ms. Huffman:

I appreciate very much your willingness to help with the Task Force for identifying the competency profile of non-completers of the Tech-Prep high school component. This Task Force will meet twice. The first meeting will be on December 12, 1993 at the University of Texas in Tyler, in room 426 of the Muntz Library from 9:00 a.m. to 4:00 p.m.

Enclosed you will find a map of UT Tyler that will show the location of the Library. If you park in lot # 10 on Campus Drive, you will enter the Library on the second floor. There are stairs and elevators near the circulation desk. If you take the elevator, turn right when you exit it and go through the double doors. If you use the stairs, as you reach the fourth floor, the double doors are facing you. Room 426 will be off the corridor behind the double doors.

Another Task Force has met and complied competency profiles for completers of the Tech-Prep high school component. On January 26, the members of these two Task Forces will convene as a Panel of Experts to identify the gap in competency attainment of these two groups of students.

I am also including a summary of parts of the grant proposal so you will have a clear picture of the project and where this activity fits into the total project.

Again, thank you for being part of this project!

Sincerely,

Ann Lewis, Director

Enclosures:

Task Force, Non-Completers
December 10, 1993
At UT Tyler, Muntz Library

Agenda

Take:
Copies of summary

Introductions

Competencies: (Have moved position on agenda)
define Refer to **purpose** paper
generic or more definitive As defined above, specific, carefully identified. Measurable standard of performance.

Summary of Project Activities

1. TF #1 completers
2. TF #2 non-completers
3. Identify gap
4. Develop courses
5. Field Test
6. Disseminate

Tech-Prep Six year plan
In packet.
High school portion by year, College portion by **quarter**
MATRIX also in packet

Work of Completer's Task Force
Reviewed Essential Elements has paragraph symbol and number
Reviewed available competency lists
Considered personal experience
Organize / expand / simplify
Compiled competency profiles as included in packet

Task Force, Non-Completers
December 10, 1993
At UT Tyler, Muntz Library

Agenda

Take:
Copies of summary

Introductions
1. Tech-Prep Overview
2. Competencies:
   define: Refer to purpose paper

3. Summary of Project Activities

1. TF #1 completers	4. Develop courses
2. TF #2 non-completers	5. Field Test
3. Identify gap	6. Disseminate

4. Tech-Prep Six year plan:
   How determined
   How used to identify courses to be considered for development

5. Work of Completer's Task Force
   Reviewed Essential Elements has paragraph symbol and number
   Reviewed available competency lists
   Considered personal experience
   Organize / expand / simplify
   Compiled competency profiles as included in packet

6. Identify Competency Profile
   Divide into groups
      Math
      Communications
      Drafting
   Using Completer Profile
      Determine the competency level of persons in your experience who have not completed Tech Prep.
         Mark those competencies on the Completer's Profile that, in your experience, most of the students who enter your program have already attained..
         Add any competencies you feel are needed.
         Indicate any competencies you feel ar inappropriate for college entry level

Tech-Prep Bridge Project
Task Force for Non-Completers of Tech-Prep HS
December 10, 1993
UT Tyler, Muntz Library

MEETING NOTES

Reviewed Process:

Outlined scope of project
Described focus of todays activities

Introduction- Name and background that relates to todays activities. This was a group of persons from diverse areas of involement with skills levels of persons entering college or workplace.

Two were Human Resource people in industry.
One worked with JTPA clients.
One with dislocated workers.
Two college remediation instructors.
One developer of training for industry.

They shared the frustrations and realities of working with persons who were educationally and socially unprepared for the step they were taking(job ap., college enrollment, and job training). Though the frame of reference from which they worked was different, the commonalities of their experience and concerns was evident.

Evaluated Non-Completers attainment of Completers Competencies

1. Described process through which competency list was developed.
2. Each considered the attainment of these competencies by persons entering into their job site or institution.
3. Divided into two groups- one to consider math, one to consider communications. Actuality- both groups considered communications. One group also considered math.

General Response- "Our people can't do any of these." Further reflection identified a few that some persons could do, but felt the majority could do few if any. Perhaps because they felt there was little they could do with a competency profile list, the discussions kept reverting to sharing of personal experiences and observations of the needs of the non-completers.

Response to CP Activity

Basically majority of students lack all competencies listed.

Math- most handle whole numbers.

Don't have concept of decimals. Even if can work problems.

Thiokol people TABE results average 8th grade math. Many persons had learned to rely on calculators to do even simple math(TABE allowed no calculators, cause of concern for test takers)

Discussion:

Centered around need for interaction of business/industry and education entities. Educators- feel they have educated the students; hand them over to business. Business needs to be involved in the education and education need to experience business use of skills.

Example- need of math to do Statistical Process Control. Need of keyboarding skills to do data input at workstation level.

Business- educators exchange/shadowing. Some type of reciprocals hands on experience.

Include TQM- importance of knowing how to work as a team(orientation).

Student needs to get a clearer perception of how skills and education is used on the job. TEACH TEAMWORK, TEAMWORK, TEAMWORK!

WRAP Up:

Because of the direction the discussions look and the seeming lack of connectedness of the competency profile idea, I decided to come to closure through a round robin summing up of what value this experience might have had for each of the TF participants.

Velma- felt more like an observer gathering ideas of what's needed. Excited to be here and be a part of this effort. Her job entails setting ed. program in place to meet specific, contracted need of industry and of coordinating testing activities.

Ruana- encourage industry persons to be involved in education. Actively recruit/gather in industry persons. Find ways to foster conception/preception of what job entails for students. Deal with self perception/low self-esteem- thinking people are born with knowledge, so if don't know it, can't learn it.

Cheryl- get a newly hired person to share with students what he/she feels they need to know, but haven't learned yet. Keyboarding skills should be considered a new required basic skill.

Claudia- suggests I go to Lone Star Steel to see their culture/environment. Computer terminals are part of all work areas- data is input by workers at the site, not by secretary. Keyboarding skills necessary for all workers. Computer literacy = usability, not history and bytes. For Tech-Prep to be successful, needs to get into the home. Parents need to realize it's not voc. ed.,but it is "technical". Need to get past "it was good enough for me(or my dad), it's good enough for my kid(self). Colleges need to get Tech Prep brochures to industrial sites to share with employees as parents of prospective students. LS has basic ed, GED prep, program for workers and community. Encourage all non-grad applicants to come there and study for GED. Can take small groups only on tours. Can split classroom size groups into more than one small group per tour. Consider flexible timing for education opportunities for shift workers. (We can help here at Pre-tech level.)

Al- time is now for tech-prep. Need to combine schools, industry, society. Involve society to inform people of options. Many who want to be doctors and make a lot of money have not considered time and expense of training. What will happen if they don't make it? What are the options along the way? HS students looking at next step usually don't consider job demand market or amount of money you make from what you do. Take away stigma of voc. ed./Tech. prep and move toward todays industry(jobs) and todays money market.

Velma- look at telecommunication linkage possibilities(to interface industry/education). Use video of industrial experience with live industry person to facilitate follow up discussion.

Jim Leather- Tap into Chambers of Commerce experts. Boss' message to TF- teach TQM.Basic English and Math. Can pick up slack in tech knowledge through on the job training.

Reference Information:

Book:

Velma Hargis- Human Development
Becoming Aware-
Velma Walker- Tarrent County Jr. College
Lynn Brokaw- Portland College

Chapters:

- Becoming Aware
- Getting Aquainted with Ourselves and Others
- Self-Awareness
- Who's in Control
- Becoming Emotional
- Interpersonal Communication
- Managing Stress
- What's Important to Me
- Life Planning

Tapes: Leathers- TQM, W.E. Demmings tapes. Faculty go through the first basic TQM class.

Tape: PBS offering "Quality or Else" 2yrs. ago- Leather has a copy. There is also a book (Quality or Else).

January 6, 1994

Texas State
Technical Colle
East Texas Center at Marsh

2400 EAST END BLVD., SO
MARSHALL, TEXAS 7567

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MARSHALL, TEXAS 75671
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FAX: 903/935-9554

Claudia Henderson
Training Administrator
Lone Star Steel
PO Box 1000
Lone Star, TX 75668

Dear Ms. Henderson:

I want to thank you again for your participation on the Task Force activities for the Carl Perkins Bridge Project and to let you know that the January 26 joint meeting of the two Task Forces will not be held.

The purpose of the joint meeting of the Task Force to identify the competency profile of completers of the secondary (high school) component of Tech Prep and the Task Force to identify the competency profile of non-completers of this part of Tech Prep was to look at the differences and identify the gap in the competency profiles of the two groups.

The Task Force for non-completers determined that the majority of persons entering their program or facility had attained few, if any, of the competencies on the profile identified by the completers's Task Force. This identified the gap in the competency levels of the two groups as basically the whole list and give us the information we need to go forward with the project's curriculum development activities.

I realize this is a very wordy letter. So, to put it more clearly, you have done your work so well, you have already accomplished what the joint meeting was to have done.

Thanks again for your valuable contributions! I will probably be contacting you again to get your input on curriculum development ideas.

Sincerely,

Ann Lewis

Ann Lewis, Director
Tech-Prep Bridge Project

nr

TSTC-ETC/TECH PREP BRIDGE PROJECT

COMPLETERS TASK FORCE

Bill Denson
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TASK FORCE 2
NON-COMPLETERS

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PANEL OF EXPERTS MEETING
4-13-94

AGENDA

Purpose of Meeting

- Quantitative Evaluation of:
  - Annotated Bibliography
  - Competency Profile #1--Completer
  - Competency Profile #2--Non-Completer
  - Gap between Profile #1 and Profile #2

Also Consider:

- Core Curriculum Plan
  - Graphic
  - Matrix
  - Course List

- Course Development from Competency Profiles
  - Competency Profile Divided
  - Resource Matrix--Competency to Course alignment
  - Class Stack
    - Drafting--not field testing
    - Math
    - Writing Skills

- Field Testing
  - What questions need answers
  - Which of above information included

MEETING NOTES
PANEL OF EXPERTS
UT TYLER

4-13-94

The Panel of Experts is composed of the members of the two task forces that worked on the Competency Profiles. This composition was recommended by the TAC at the initial meeting in September, 1993, (at the TAPSOEA meeting at South Padre Island).

Four of the eighteen persons on these two task forces attended this meeting: Ruana Sullivan, counselor, Clyde Ford, college science instructor, Cori Stanley, remedial English instructor, and Claudia Henderson, industry manager of workplace training.

The purpose of this meeting was the quantitative evaluation of: 1) the Competency Profile for completers of the secondary component the of Tech-Prep program, 2) the competency profile of non-completers of the secondary component of the Tech-Prep program, and 3) the identification of the competencies in the gap between the two competency profiles.

Members of the Panel evaluated the Competency Profile of completers of the secondary component of Tech-Prep as sufficiently comprehensive in scope. They identified some poorly worded phrases and typos. They discussed general vs detailed competencies but did not suggest any specific changes. Most of the competencies are in general concept terms requiring simplification into sub-competencies (objectives, sub-objectives).

The Task Force that was responsible for determining the competency profile of non-completers, used the completers competency profile as a starting point and considered which of these competencies would have been mastered by persons entering their training center, workplace, or college. Their response was that few, if any, of the competencies on the completers' competency profile had been mastered by persons they have entering their programs or workplace. Therefore, the competency profile of non-completers is blank, no specific competencies consistently mastered. The Panel of Experts agreed that this is a valid finding. Evaluation: the scope and comprehensiveness of this "non" profile represented the true picture from the perspective of this Panel.

The members of the Panel agreed that this established the gap in the two competency profiles as all of the competencies on the completer's competency profile. At this site, TSTC-ETC, the college placement tests indicate that about 50% of the incoming students need remediation. Perhaps the majority of the persons on the non-completers task force were the front-line educators for those needing remediation. In some ways, the difference is academic because an effective Bridge Program will need to provide learning opportunities for the whole spectrum of the Competency Profile in order to meet the needs of students entering at the lower levels.

The following products, developed in the process of preparing to use the competency profiles in field test classes, were shared with the members of the Panel of Experts:

- Model Bridge Curriculum Plan (graphic)
- Matrix that identified core secondary courses
- List of possible secondary school courses to include

- Competency list to course development process
    - Competency Profile check lists
    - Competency-resource matrix
    - Specific course:
        - Syllabus
        - Objectives, Sub-objectives of course
        - Course outline
        - Sample of Competency Standard of Mastery

My thoughts:
With all of the above, the prevailing mood was one of "pie in the sky" -- if they only really knew how to read and do math, we could teach them what we need them to know. It takes being tough and unpopular to create valid expectations and then hold the line against advancement until standards are met.

Presentations Workshops

Barry Russell
Temple Jr. College
2600 South First St.
Temple TX 75455

Sent 11/23

CALL FOR PROPOSALS

Texas Tech Prep Conference
March 28-30, 1994
Red Lion Hotel
Austin, Texas

DEADLINE: November 30, 1993

The Professional Development Committee is searching for presenters for the statewide Tech Prep conference to be held March 28-30. In order to have as much input as possible, please provide the committee with as many presenters/ presentations as possible from your area. All presenters will participate without remuneration. Each consortium or presenter will be responsible for the travel and presentation costs incurred.

Focus : The focus of the conference will be to show off the best programs in the state which highlight Tech Prep, Work Force Development, Apprenticeships, School-to - Work Transition, etc. Presenters should be from business as well as secondary and post secondary education. It is also suggested that some students talk about what they are getting out of Tech Prep. We are looking at a variety of presentations in a number of innovative formats (small group, large groups, demonstrations, interactive, etc.).

Bridge to Technology
Title of Presentation

Ann Lewis
Name of Contact Person/Major Presenter

Name(s) of Other Presenters

Length of Presentation 1/2 to 1 hr.

Address of Contact PO Box 1269, Marshall, Tx 75671

903-935-1010	903-935-9554
Phone Number of Contact	FAX Number of Contact

Projected Audience: Teachers Business People Administrators Counselors Tech Prep Coordinators

Audio-Visual Equipment:
(Overhead projectors and screens will be provided at no charge. Other equipment will be charged directly to the consortium or presenter)

Please provide any other information which you think would help the committee make a decision to include this presentation in the Conference agenda.

To share preliminary findings of the Perkins Tech-Prep Bridge Grant activities that identified the gap in competencies between completers and non-completers of Tech-Prep secondary components.

PRESENTATION DESCRIPTION FORM

Education that Works Conference
Red Lion Hotel, Austin, Texas
March 28-30, 1994

(Note: This form will be used to collect information to be printed in the conference proceedings. A copy of the conference proceedings will be provided to each registered participant. Please make certain that all information is complete and correct. The information must be returned by March 1.)

Title of Presentation: BRIDGE TO TECHNOLOGY

Name(s) and Affiliations of Presenters
(e.g., John Doe, Principal, Jane Smith High School):

1. Dr. John Carnes, Associate Dean of Instruction, Texas State Technical College
2. Ann Lewis, Director of Pre-Technical Studies, TSTC - East Texas Center
3. Diane S. Nobles, Director of Technical Preparation, TSTC - East Texas Ce

College Full Name → 4. Texas State Technical College - East Texas Center in Marshall

Person to Contact for More Information:

Name Ann Lewis
Address P.O. Box 1269
City, State, and Zip Marshall, Texas 75671
Phone (903) 935-1010
FAX (903) 935-9554

Brief Description for Conference Agenda
(less than 30 words):

A competency-based education experience, which will describe the process used to create a "Bridge To Technology" for non-tech prep students entering the postsecondary level.

BEST COPY AVAILABLE

TUESDAY, March 29, 1994

Implementing Tech Prep from a High School Principal's Point of View
Tuesday, 29-Mar, 10:00 AM to 10:50 AM
Salon A, Room capacity - 50

Redirecting, Refocusing and Restructuring Education for the 21st Century
Tuesday, 29-Mar, 10:00 AM to 10:50 AM
Salon B, Room capacity - 50

How to Begin: Involving Business, ISDs, and Colleges in Tech Prep
Tuesday, 29-Mar, 10:00 AM to 10:50 AM
Salon C, Room capacity - 50

TBEC Linking Texas Scholars, Tech Prep, and Recommended High School Program
Tuesday, 29-Mar, 10:00 AM to 10:50 AM
Salon D, Room capacity - 150

Apprenticeship Training
Tuesday, 29-Mar, 10:00 AM to 10:50 AM
Salon E, Room capacity - 150

Customizing TQM to the Classroom
Tuesday, 29-Mar, 10:00 AM to 10:50 AM
Salon F, Room capacity - 50

Career Awareness
Tuesday, 29-Mar, 10:00 AM to 10:50 AM
Salon G, Room capacity - 50

Model Programs: Early Childhood Professions
Tuesday, 29-Mar, 10:00 AM to 10:50 AM
Salon H, Room capacity - 50

Learning Styles
Tuesday, 29-Mar, 10:00 AM to 11:50 AM
Sundance, Room capacity - 40

How Tech Prep Partnerships Help Make High Schools Work
Tuesday, 29-Mar, 11:00 AM to 11:50 AM
Salon A, Room capacity - 50

Career Passport Portfolios
Tuesday, 29-Mar, 11:00 AM to 11:50 AM
Salon B, Room capacity - 50

Tech Prep in a Rural School District/Tech Prep and the Role of Agri-Science/Tech Prep: What We Have Done
Tuesday, 29-Mar, 11:00 AM to 11:50 AM
Salon C, Room capacity - 50

Quality Work Force and Tech Prep
Tuesday, 29-Mar, 11:00 AM to 11:50 AM
Salon D, Room capacity - 150

Making Changes in Education through Tech Prep
Tuesday, 29-Mar, 11:00 AM to 11:50 AM
Salon E, Room capacity - 150

Teaching College Level Tech Prep Classes to High School Students
Tuesday, 29-Mar, 11:00 AM to 11:50 AM
Salon F, Room capacity - 50

Involving Business in Tech Prep: Practical Approaches to IMPACT Curriculum
Tuesday, 29-Mar, 11:00 AM to 11:50 AM
Salon G, Room capacity - 50

Tech Prep and MTL: How It's Working
Tuesday, 29-Mar, 11:00 AM to 11:50 AM
Salon H, Room capacity - 50

San Patricio County Economic Development Council
Tuesday, 29-Mar, 1:30 PM to 2:20 PM
Salon A, Room capacity - 50

Implementing Tech Prep into Rural High Schools
Tuesday, 29-Mar, 1:30 PM to 2:20 PM
Salon B, Room capacity - 50

The Automated Student and Adult Learner Follow-up System
Tuesday, 29-Mar, 1:30 PM to 2:20 PM
Salon C, Room capacity - 50

Tech Prep: Cooperation, Colllaboration and Change
Tuesday, 29-Mar, 1:30 PM to 2:20 PM
Salon D, Room capacity - 150

Curriculum Mentoring
Tuesday, 29-Mar, 1:30 PM to 2:20 PM
Salon E, Room capacity - 150

1. The Counselor and Tech Prep 2. Portfolio Use for the Counselor 3. Counselors of the 21st Century
Tuesday, 29-Mar, 1:30 PM to 2:20 PM
Salon F, Room capacity - 50

Jumping In-How to Get Envolved with Tech Prep
Tuesday, 29-Mar, 1:30 PM to 2:20 PM
Salon G, Room capacity - 50

Using Aptitude & Interest Assessments
Tuesday, 29-Mar, 1:30 PM to 2:20 PM
Salon H, Room capacity - 50

Effective Teaching Techniques

Tuesday, 29-Mar, 1:30 PM to 2:20 PM
Sundance, Room capacity - 40

The SCANS Connection --A Model for Instructional Delivery

Tuesday, 29-Mar, 3:00 PM to 3:50 PM
Salon A, Room capacity - 50

Career Counseling Using Channel 1

Tuesday, 29-Mar, 3:00 PM to 4:50 PM
Salon B, Room capacity - 50

Planning is the Key to Success

Tuesday, 29-Mar, 3:00 PM to 3:50 PM
Salon C, Room capacity - 50

The Austin Project

Tuesday, 29-Mar, 3:00 PM to 3:50 PM
Salon D, Room capacity - 150

Metamorphosis in Small and Large Districts

Tuesday, 29-Mar, 3:00 PM to 4:50 PM
Salon E, Room capacity - 150

Career Success: Skills That Pay--A Model Employability Skills Workshop for High School Students and College Students

Tuesday, 29-Mar, 3:00 PM to 3:50 PM
Salon F, Room capacity - 50

"When I Get Big, I Wanna Be A ..."

Tuesday, 29-Mar, 3:00 PM to 3:50 PM
Salon G, Room capacity - 50

The TQM "Walk the Talk" Classroom Model in Action

Tuesday, 29-Mar, 3:00 PM to 4:50 PM
Salon H, Room capacity - 50

Multi-media Presentations

Tuesday, 29-Mar, 3:00 PM to 3:50 PM
Sundance, Room capacity - 40

Interagency Networking Systems

Tuesday, 29-Mar, 4:00 PM to 4:50 PM
Salon A, Room capacity - 50

Model Programs: Electronics

Tuesday, 29-Mar, 4:00 PM to 4:50 PM
Salon C, Room capacity - 50

Integration: English, Social Studies, Vocational Printing

Tuesday, 29-Mar, 4:00 PM to 4:50 PM
Salon D, Room capacity - 150

The Automated Career Information Delivery System

Tuesday, 29-Mar, 4:00 PM to 4:50 PM
Salon F, Room capacity - 50

Drop-out Recovery through Alternative High Schools and the Introduction of Bridging/Leveling to Prepare for Postsecondary Tech Prep`

Tuesday, 29-Mar, 4:00 PM to 4:50 PM
Salon G, Room capacity - 50

Communication Skills for the Twenty-First Century: Technical Writing and Electronic Communication

Tuesday, 29-Mar, 4:00 PM to 4:50 PM
Sundance, Room capacity - 40

WEDNESDAY, March 30, 1994

Computer-Assisted Guidance: Catalyst for Career Preparation

Wednesday, 30-Mar, 8:30 AM to 9:30 AM
Lone Star I, Room capacity - 50

The Skills Development and Certification Projects

Wednesday, 30-Mar, 8:30 AM to 9:30 AM
Lone Star II, Room capacity - 50

Tech Prep is NOT a Program, It's a Process

Wednesday, 30-Mar, 8:30 AM to 9:30 AM
Lone Star III, Room capacity - 50

Meeting the Demand for Intergenerational Professionals in the 21st Century

Wednesday, 30-Mar, 8:30 AM to 9:30 AM
Salon A, Room capacity - 50

Pilot Program in Intergration of Electronics/Algebra I - Block Scheduling with Dual Teaching Schedule - Offered in Vocational Building

Wednesday, 30-Mar, 8:30 AM to 9:30 AM
Salon B, Room capacity - 50

Apprenticeship

Wednesday, 30-Mar, 8:30 AM to 9:30 AM
Salon C, Room capacity - 50

Advanced Level Communications, Mathematics, Physics, ect.

Wednesday, 30-Mar, 8:30 AM to 9:30 AM
Salon D, Room capacity - 150

Round Table Sessions with Secondary/Post-secondary to Develop Articulation Agreements

Wednesday, 30-Mar, 8:30 AM to 9:30 AM
Salon E, Room capacity - 150

Making Time-Involvement by te Business Community
Wednesday, 30-Mar, 8:30 AM to 9:30 AM
Salon F, Room capacity - 50

★ Bridge to Technology
Wednesday, 30-Mar, 8:30 AM to 9:30 AM
Salon G, Room capacity - 50

Tech Prep Public Relations
Wednesday, 30-Mar, 8:30 AM to 9:30 AM
Salon H, Room capacity - 50

East Texas State University
Wednesday, 30-Mar, 8:30 AM to 9:30 AM
Sundance, Room capacity - 40

Corporate Trainers-The Other Side of the Story
Wednesday, 30-Mar, 10:00 AM to 11:00 AM
Lone Star I, Room capacity - 50

School to Work Transition: A Manufacturing Model
Wednesday, 30-Mar, 10:00 AM to 11:00 AM
Lone Star II, Room capacity - 50

Career Centers of the Future
Wednesday, 30-Mar, 10:00 AM to 11:00 AM
Lone Star III, Room capacity - 50

Model Programs: Law Enforcement
Wednesday, 30-Mar, 10:00 AM to 11:00 AM
Salon A, Room capacity - 50

School to Work
Wednesday, 30-Mar, 10:00 AM to 11:00 AM
Salon B, Room capacity - 50

Community Involvement in Career Cluster Development
Wednesday, 30-Mar, 10:00 AM to 11:00 AM
Salon C, Room capacity - 50

NAFTA
Wednesday, 30-Mar, 10:00 AM to 11:00 AM
Salon D, Room capacity - 150

Demonstration of Computerized Career Portfolio Description
Wednesday, 30-Mar, 10:00 AM to 11:00 AM
Salon E, Room capacity - 150

Meeting the Challenges of Tech Prep for Rural Areas
Wednesday, 30-Mar, 10:00 AM to 11:00 AM
Salon F, Room capacity - 50

Tech Prep Video Review and Critique
Wednesday, 30-Mar, 10:00 AM to 11:00 AM
Salon G, Room capacity - 50

Learning Styles - Applications in Secondary/Post-secondary

Wednesday, 30-Mar, 10:00 AM to 11:00 AM
Salon H, Room capacity - 50

CORD

Wednesday, 30-Mar, 10:00 AM to 11:00 AM
Sundance, Room capacity - 40

BRIDGE PROJECT PRESENTATION

OUTLINE

Overview of Grant project ---- CBE process being field tested

Bridge Project Outline--Ann Lewis

Result of Carl Perkins TP supplementary grant

I. Objectives of Grant
  - A. Tech. Adv. Committee
  - B. Identify comps. to be addresses in Bridge Program
    - -- Establish competency profile of completers of TP hs component
    - -- Establish competency profile of non-completers
    - -- Determine gap
  - C. Develop model non-collegiate-level curricula to bridge the gap between Tech-Prep non-completers and the entry requirements of Tech Prep programs at community and technical colleges.
    - -- competency-based
    - -- open-entry, self-paced to extent possible
  - D. 1. Field test the model curriculum determine appropriateness of curriculum resources
    - 2. Make recommendations for further development
  - E. Statewide dissemination--this workshop

IDENTIFY COMPETENCIES TO BE INCLUDED IN BRIDGE PROGRAM

Task Forces

Task Forces composed of technical, academic, and workplace basic skills educators from community and technical colleges, regional education service centers, public schools, industry.

A. Task Force I: to identify competency profile of completer
  1. Resources:
     - -- Essential Elements (9-12)
     - -- Competency lists from existing programs
     - -- Program needs
     - -- Workplace expectations.
  2. Process: teams of Task Force members
     - -- Evaluated resource info.
     - -- Created competency lists for Reading, Writing, Math, and Drafting.
     - -- Considered sciences, did not complete competency lists.
  3. Results: Reading, writing, math, drafting competency profiles of TP completers of HS programs.

B. Task Force II: To identify competency profile of non-completer.
  1. Resource: Competency Profiles from TF I
     TF members experience as educators
  2. Process: teams of Task Force members
     -- Considered completer profile competencies
     -- Identified those not usually attained by persons who enter their school, program, or workplace.
  3. Results: Determination that the GAP was essentially the whole Competency profile

Approximately 50-60% incoming students need remed.

Findings of Task Force activities:

An effective bridge program must be prepared for the whole range of remediation courses.
competency-based
open entry/ self-paced/ open exit

IV. Competency-Based Education

Duty-Task, task = comps; Units-Lessons, lesson = competency

Define: A performance-based process leading to demonstrated mastery of identified skills necessary for the individual to function proficiently at the next (college) level.

Know where going--goal
Know how to get there--plan
Know when "arrived"--mastery

1. Known Goal:

Competency Profile. Know where you are headed.
  A. Competencies for learning unit are carefully identified
  B. All concerned know what these competencies are
     employer, instructor, STUDENT
  C. Standards for mastery are clearly stated and openly shared

Know how to get there

Personal Education Plan:
  A. Determine students current level of competency mastery
    1. Pre-test to document prior learning or achievement
    2. Note mastered competencies on Competency Profile

B. Identify curriculum resources (learning modules) for each competency
  1. Focus of learning process is transfer of knowledge, application

Know when you "arrive"

Document mastery of individual competencies mastered.
  1. Application of concept demonstrates mastery
  2. Competency Profile indicates mastery

V. Competency Profile to Course

(1) A. Identify competencies to be addressed in course
  1. Competency profile of TP completers
    -- Spectrum of profile
(2) 2. Divide into course segments
(3) 3. Consider specific competency needs for entry into specific program courses.
    -- Work with staff of program area, ex. chem tech
    -- Identify competencies on list that are needed for entry level students of first quarter courses.
    -- Identify competencies not on the list that are needed for entry level students of first quarter courses.
(4) B. Develop course syllabus and outline
(Process) Using competency profile selected for the course
  1. Divide competencies into units of study
    Develop each competency statement into an instructional objective, considering:
      -- competency to be attained.
      learning domain (cognitive, psychomotor, affective)
(5) 2. Determine assessment method (knowledge, written, performance based)
(6) 3. Identify standard for mastery

C. Identify instructional curriculum resources
  - Match competencies with instructional resources
  1. Evaluate current resources for addressing specific competencies.

TSTC-ETC (Matrix)
(a) Computer-based instruction
  (1) JSEP: Developed by the Army
    TSTC-ETC named beta test site
    Largest computer-based basic skills prog developed for adults
    Job Specific, Prescriptive
  (2) Skills Bank, review of basic skills

- (3) Queue Algebra, Math topics, Grammar
- (4) Text publisher's software support
- (b) Print material: Texts, handouts, etc instructional resources.

2. Identify competencies with insufficient instructional resources
3. Fill the resource gaps
4. Develop unit assignments that address competencies

CBE Curriculum/Student Management -- suggestions

Management tools (Paper-based, can be computer generated with appropriate software)

A. Individual students's Course Competency Profile:
   1. Competency Profile: competencies to be mastered in each course.
   2. Each competency mastered is noted
   3. At end of course, not only grade, but what actually has demonstrated as mastered or not mastered. (Learn. disab. -- drafting)

B. Assignment Completion Record:
   1. List of assignments to be done for each unit.
   2. Assignments reflect resources for the competency and are specific as to text or computer (lesson, page, number of problems)
   3. All pertinent information is provided to enable the student to progress through the unit at his/her own pace, getting help from instructor as needed

C. Course progress record:
   1. List of all units to be completed for the course.
   2. Provides compact status record
   3. Can be used to record unit post test scores

Process:

A. Pre-test: identifies competencies already mastered
B. Course progress record indicates units previously mastered and those yet to be completed.
C. Assignment completion record needed only for units not mastered
D. Post-test (course final)

Bridge To Technology

Carl Perkins Tech Prep

Supplementary Grant

Handouts & overheads

Objectives of Grant

I. Identify comps. to be addresses in Bridge Program

- Establish competency profile of completers of TP high school component
- Establish competency profile of non-completers
- Determine gap

II. Develop model non-collegiate-level curricula to bridge the gap

III. Field test the model curriculum
Make recommendations for further development

IV. Statewide dissemination
--this workshop

Competency-Based Education

Define: A performance-based process leading to demonstrated mastery of identified skills necessary for the individual to function proficiently at the next level.

Three Basic Parts

1. Known Goal: Competency profile.
   Competencies for learning unit
   are carefully identified

2. Know what you have to do:
   Personal Education Plan
   Document prior knowledge

3. Know When You Get There:
   Document competencies mastered.

Competency Profile -- Course

1. Identify competencies addressed in course from Competency Profile

2. Divide into course segments

3. Work with staff of program area

4. Develop course outline
    - Divide competencies into units of study

5. Develop each competency statement into instructional objective

6. Identify standard for mastery
    - Criterion referenced to known standards.

Match Competencies to Resources

- Identify instructional curriculum resources
- Identify competencies with Insufficient instructional resources
- Fill the resource gaps
- Develop unit assignments that address competencies

Management Tools

Individualized

Course Competency Profile:

- Lists competencies to be mastered in each course.

Assignment Completion Record:

- List of assignments to be done for each unit.

Course Progress Record:

- Record of course units completed

CBE PROGRAM CHARACTERISTICS

- Program goals are agreed upon by representatives of the community, employers, the agency staff, and the participants concerned.
- The process for placing, monitoring, and certifying participant competency parallels the program's goals and in an integral part of program planning.
- Individualization of instruction is based on participant or learners needs as indicated by pre/post testing of competency attainment and are not on what others in a group are achieving.
- Instruction is frequently developed in modules and sometimes packaged in developmental sequences.
- Instructional strategies teach course concepts and basic skills through their application in a functional context that is relevant to the learner's goals.
- Because assessment, placement, and instruction are integrated components of CBE, it is essential that agency personnel responsible for management, guidance and instruction work closely together as a team.

Handout 2.

PROGRAM COMPONENTS OF COMPETENCY-BASED AND NON-COMPETENCY-BASED PROGRAMS

Program Components	Competency-Based Programs	Non-Competenc Based Program
Desired outcomes	Specific, measurable statements; typically at an objective level	Non-specific, not necess measurable; typically g statements
Instructional content	Outcome or competency based	Subject-matter based
Amount of time provided for instruction	Continue until participant demonstrates mastery	Fixed units of time (e.g semester, term)
Mode of instruction	Emphasis on instructor as facilitator of participant performance. Uses a variety of instructional techniques and groups	Emphasis on instructor presentation
Focus of instruction	What the participant needs to learn (especially related to employability and employment)	What instructor is able likes to teach
Instructional materials	Variety of texts and media based on the various learning styles of the participants in the program	Single sources of mater (Text and/or workbook
Feedback on performance	Results reported immediately after performance in understandable terms to the participant	Delayed feedback
Pace of instruction	Paced to each individual's rate of learning	Instructor or group pace
Testing	Criterion(competency) referenced-test measures participants' progress toward attaining intended outcomes	Norm referenced-based relative performance of
Exit Criteria	Participant demonstrates the specified competencies	Final tests and grades

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OURSE: ENGL.010 WRITING SKILLS I
EPARTMENT: ENGL PRE-TECH ENGLISH

EQ. NO.	G/O NUMBER	TITLE
	E010.01.01	Demonstrate knowledge of proper verb usage.

SUB-OBJ. NUMBER	TITLE
E010.01.01.01	Recognize action and linking verbs.
E010.01.01.02	Identify helping verbs.
E010.01.01.03	Identify and correctly use the principal parts of verbs, both regular and irregular.
E010.01.01.04	Generate sentences using identified verb type.

E010.01.02 Demonstrate knowledge and proper use of adjectives and adverbs.

SUB-OBJ. NUMBER	TITLE
E010.01.02.01	Identify the function of adjectives and adverbs in a sentence.
E010.01.02.02	Differentiate between adjectives and adverbs.
E010.01.02.03	Use the comparison process for adjectives and adverbs.
E010.01.02.04	Generate sentences using adjectives and adverbs.

E010.01.03 Demonstrate proper use of verbal and prepositional phrases.

SUB-OBJ. NUMBER	TITLE
E010.01.03.01	Define a phrase.
E010.01.03.02	Identify the prepositional phrase and its function in a sentence.
E010.01.03.03	Identify the verbal phrase and its function in a sentence.
E010.01.03.04	Generate sentences using verbal and prepositional phrases.

E010.01.04 Demonstrate understanding of subject-verb agreement.

SUB-OBJ. NUMBER	TITLE
E010.01.04.01	Identify correct subject-verb agreement by applying practical methods of sentence

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Handout 4

Handout 4

MATHEMATICS FOR THE TRADES = MT
WORKING WITH NUMBERS, ALGEBRA = WN
GEOMETRY & ALGEBRA = GA
COMPUTATION = CM
SPECIAL TOPICS = ST

SKILLS BANK = SB
CONCEPTS = CN
JSEP = JS
WORD PROBLEMS = WP
Q-ALGEBRA = Q

COMPETENCY STATEMENT	RESOURCES						
MATH	MT	WN	JS	SB	ST	Q	COURSE TARGET
WHOLE NUMBERS							
1. Write whole numbers from oral statement and written text (six thousand three = 6003).	Intro ch 1		1a				050
2. Add and subtract single and multiple digit whole numbers.	1-1 1-2		12a 12b	CM 1,2			050
3. Multiply and divide single and multiple digit whole numbers.	1-3 1-4		13a	CM 3,4			050
4. Use arithmetic operations to solve work problems with whole numbers.	1-1 1-2 1-3 1-4		12a 12b	WP 1-7			050
5. Read and count single and multiple digit whole numbers.	Intro ch 1		1h				050
6. Round off single and multiple digit whole numbers.	3-2		1g	CN 4			050
7. Perform arithmetic operations using correct order of operations.	1-5		16c	GA 17			050

Handout 5

STUDENT COMPETENCY PROFILE

NAME____________________________
S.S.#____________________________
DATE____________________________

COMPETENCY STATEMENT	MASTERY		
MATH	Mastery Level	Date	Initials
WHOLE NUMBERS			
1. Write whole numbers from oral statement and written text (six thousand three = 6003).			
2. Add and subtract single and multiple digit whole numbers.			
3. Multiply and divide single and multiple digit whole numbers.			
4. Use arithmetic operations to solve work problems with whole numbers.			
5. Read and count single and multiple digit whole numbers.			
6. Round off single and multiple digit whole numbers.			
7. Perform arithmetic operations using correct order of operations.			
8. Solve word problems with whole numbers.			
FRACTIONS			
9. Read and write common fraction with understanding of relative size.			
10. Add and subtract common fractions.			
11. Multiply and divide common fractions.			
12. Solve word problems with common fractions.			
13. Reduce fractions to lowest terms.			
14. Find lowest common denominator.			
15. Change fractions from denominator to another.			

Handout 6

Math 050

Assignment Completion Record

Unit 4 (INT) Percent

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zint0504 ***

Computer: Skills Bank II

Grade Date Completed

JSEP Lessons:
13a Multiply and Divide Whole Numbers.. _____ _____
12a Adding and Subtracting Whole Numbers - No Carrying _____ _____
12b Add and Subtract Whole Numbers - Carrying and Borrowing _____ _____
12c Add and Subtract Decimals.......... _____ _____
13b Multiply and Divide Decimal Numbers _____ _____
14d Convert Decimals, Percents, and Fractions _____ _____

4-1 Introduction to Percent, pp. 133-140
Book: Exercise 4-1
A. 1,5,9,13,17,19
B. 1,5,6,7,9,12,13.......... _____..... _____

Computer: Skills Bank II (optional)
Word Problems:
Lesson 12 Finding a Percent Using Proportions _____ _____

4-2 Percent Problems, pp. 140-152
Book: Exercise 4-2
A.,B. All evens
C. 1,3,5,6,8................ _____ _____

Computer: Skills Bank II (optional)
Word Problems:
Lesson 17 Percent of Change........... _____ _____

4-3 Applications of Percent Calculations, pp. 152-166
Exercise 4-3
1,2,3,4,5,6,9,10,11,12,13,15,17,19 _____ _____

Unit 4 Turn in exercises and ask for Test 4.
Unit 4 Exercises _____ _____

Handout 7

Math 050

Course Progres Record

		Grade	Date Completed
Pre-Test			________
Unit 1	Whole Numbers................	________	________
Unit 2	Fractions....................	________	________
Unit 3	Decimals.....................	________	________
Unit 4	Percents.....................	________	________
Unit 5	Measurements.................	________	________
	Course Grade.........	________	________

If you would like a definitive workshop on Competency Based Education, contact:

Dr. Eugenia Travis
Tech-Prep Director
Northeast Texas Consortium
P.O. Box 1307
Mount Pleasant, Texas 75456
Phone: 903 / 572-1911

East Texas
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BRIDGING THE GAP

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Administrative Assistant
(903) 566-7319

April 18, 1994

TO: *Presenters at Texas Tech Prep Conference*

FROM: *Doris Sharp* DS

SUBJECT: *KUDOS TO YOU!!*

Thanks and kudos to each of you for your presentations at the first annual state Tech Prep Conference! Your willingness to serve, coupled with your great presentations, helped to make this the successful conference that it was.

Dr. Kenneth Ashworth's comments are attached. He felt the same way that most of the 1,300 attendees did.

Also attached is information on presenting at the AVA National Conference in December in Dallas. Hope some of you will consider it!

If you haven't turned in all of your outstanding expenses, please contact Gayle Ferrell. She'll get you taken care of!

Earle Ann, Gayle, and I appreciate you.

Distribution:

Roy Knight
Margaret Beadles
Mike Clay
Dewayne Taylor
Joyce Burlison
Pat Anderson
Donna Brownlow
Jim Fite
Colleen Fleming
Debra Handorf
Jill Harris
Kathleen Kelly
Edwina Miller
Ron Nelms
Thomas George
Bob Benbow
Dan Chadwick
Beryl McKinnerney
Elaine Wesley
Lynda Porsch
Ann Lewis
Diane Nobles

BRIDGE TO TECHNOLOGY
MARCH 30, 1994 8:30 TO 9:30AM

SURVEY

Rate from 1-5 with 1 being the highest and 5 the lowest.

1. The presentation was well organized.

RESULTS: [1] 6 [3] 10 [5] 0
[2] 5 [4] 3

AVG: 2.42

2. The information presented was concise and understandable.

RESULTS: [1] 3 [3] 9 [5] 0
[2] 8 [4] 4

AVG: 2.58

3. The handouts were pertinent and helpful.

RESULTS: [1] 10 [3] 5 [5]0
[2] 8 [4] 1

AVG: 1.88

4. Your program can use this information.

RESULTS: [1] 6 [3] 7 [5] 0
[2] 10 [4] 1

AVG: 2.13

Texas State Technological College

Teaching Adult Learners

March 2 and 3, 1994

I. Pedagogical Model vs. the Andragogical Model

A. Definitions
B. Choosing a model
C. Implications
D. Learning Contracts

II. Communication with Adult Learners

A. Blocks to Effective Communication
B. Links to Change
C. Human Needs
D. Self Exploration
E. Reaction Patterns
F. Helpful Attributes

III. Social Conditioning and the Adult Learner

A. The Social Clock
B. Social Yardsticks that Measure Behavior

IV. Solving Problems

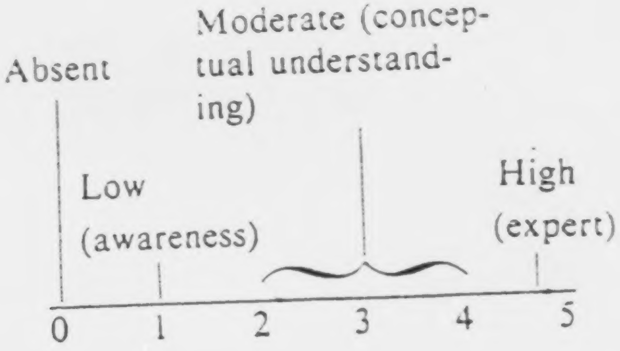
A. Goals
B. Tools for Helping
C. Elements of Body Language to Observe
D. Listening with the Third Ear
    1. Helpful Responses
    2. Unhelpful Responses
    3. Pitfalls

COMPETENCIES FOR THE ROLE OF ADULT EDUCATOR/TRAINER

Name ______________________________

Program ______________________________

Indicate on the six-point scale below the level of each competency require performing the particular role you plan to engage in by placing an "R" a appropriate point. Then indicate your present level of development of each petency by placing a "P" at the appropriate point. For example, if you pl make your career in teaching, you might rate required competencies as a l ing facilitator as high and as a program developer and administrator as lo moderate; whereas if you plan a career as a college administrator, you migh the competencies as a learning facilitator as moderate and as a program d oper and administrator as high. (Blanks have been provided at the end of section for the learners to add competencies of their own.)



Essential Competencies **Competency Sca**

As a Learning Facilitator

A. Regarding the conceptual and theoretical framework of adult learning:

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1. Ability to describe and apply modern concepts and research findings regarding the needs, interests, motivations, capacities, [illegible] characteris-

0 1 2 3 4

Ability to describe the differences in assumptions about youths and adults as learners and the implications of these differences for teaching.

0 1 2 3 4 5

Ability to assess the effects of forces impinging on learners from the larger environment (groups, organizations, cultures) and manipulate them constructively.

0 1 2 3 4 5

Ability to describe the various theories of learning and assess their relevance to particular adult learning situations.

0 1 2 3 4 5

Ability to conceptualize and explain the role of teacher as a facilitator and resource person for self-directed learners.

0 1 2 3 4 5

6.

0 1 2 3 4 5

Regarding the designing and implementing of learning experiences:

1. Ability to describe the difference between a content plan and a process design.

   0 1 2 3 4 5

2. Ability to design learning experiences for accomplishing a variety of purposes that take into account individual differences among learners.

   0 1 2 3 4 5

3. Ability to engineer a physical and psychological climate of

   0 1 2 3 4 5

4. Ability to establish a warm, empathic, facilitative relationship with learners of all sorts. 0 1 2 3 4
5. Ability to engage learners responsibly in self-diagnosis of needs for learning. 0 1 2 3 4
6. Ability to engage learners in formulating objectives that are meaningful to them. 0 1 2 3 4
7. Ability to involve learners in the planning, conducting, and evaluating of learning activities appropriately. 0 1 2 3 4

C. Regarding helping learners become self-directing:

1. Ability to explain the conceptual difference between didactic instruction and self-directed learning. 0 1 2 3 4
2. Ability to design and conduct one-hour, three-hour, one-day, and three-day learning experiences to develop the skills of self-directed learning. 0 1 2 3 4
3. Ability to model the role of self-directed learning in your own behavior. 0 1 2 3 4
4. 0 1 2 3 4

D. Regarding the selection of methods, techniques, and materials:

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1. Ability to describe the range of [illegible] izing learning experiences. 0 1 2 3 4

Essential Competencies	Competency Scale
2. Ability to describe the range of techniques available for facilitating learning.	0 1 2 3 4 5
3. Ability to identify the range of materials available as resources for learning.	0 1 2 3 4 5
4. Ability to provide a rationale for selecting a particular method, technique, or material for achieving particular educational objectives.	0 1 2 3 4 5
5. Ability to evaluate various methods, techniques, and materials as to their effectiveness in achieving particular educational outcomes.	0 1 2 3 4 5
6. Ability to develop and manage procedures for the construction of models of competency.	0 1 2 3 4 5
7. Ability to construct and use tools and procedures for assessing competency-development needs.	0 1 2 3 4 5
8. Ability to use a wide variety of presentation methods effectively.	0 1 2 3 4 5
9. Ability to use a wide variety of experiential and simulation methods effectively.	0 1 2 3 4 5
10. Ability to use audience-participation methods effectively.	0 1 2 3 4 5
11. Ability to use group dynamics and small-group discussion techniques effectively.	0 1 2 3 4
12. Ability to invent new techniques to fit new situations.	0 1 2 3 4
13. Ability to evaluate learning outcomes and processes and se- [illegible] construct appropriate	0 1 2 3 4

14. Ability to confront new situations with confidence and a high tolerance for ambiguity. 0 1 2 3 4

15. 0 1 2 3 4

As a Program Developer

A. Regarding the planning process:

1. Ability to describe and implement the basic steps (e.g., climate setting, needs assessment, formulation of program objectives, program design, program execution, and evaluation) that undergird the planning process in adult education. 0 1 2 3 4
2. Ability to involve representatives of client systems appropriately in the planning process. 0 1 2 3 4
3. Ability to develop and use instruments and procedures for assessing the needs of individuals, organizations, and subpopulations in social systems. 0 1 2 3 4
4. Ability to use systems-analysis strategies in program planning. 0 1 2 3 4
5. 0 1 2 3 4

B. Regarding the designing and operating of programs:

1. Ability to construct a wide variety of program designs to meet

mental education, supervisory and management development, organizational development, etc.).

2. Ability to design programs with a creative variety of formats, activities, schedules, resources, and evaluative procedures.
   0 1 2 3 4 5
3. Ability to use needs assessments, census data, organizational records, surveys, etc., in adapting programs to specific needs and clienteles.
   0 1 2 3 4 5
4. Ability to use planning mechanisms, such as advisory councils, committees, task forces, etc., effectively.
   0 1 2 3 4 5
5. Ability to develop and carry out a plan for program evaluation that will satisfy the requirements of institutional accountability and provide for program improvement.
   0 1 2 3 4 5
6.
   0 1 2 3 4 5

As an Administrator

A. Regarding organizational development and maintenance:

1. Ability to describe and apply theories and research findings about organizational behavior, management, and renewal.
   0 1 2 3 4 5
2. Ability to formulate a personal philosophy of administration
   0 1 2 3 4 5

3. Ability to formulate policies that clearly convey the definition of mission, social philosophy, educational commitment, etc., of an organization.

0 1 2 3 4

4. Ability to evaluate organizational effectiveness and guide its continuous self-renewal processes.

0 1 2 3 4

5. Ability to plan effectively with and through others, sharing responsibilities and decision-making with them as appropriate.

0 1 2 3

6. Ability to select, supervise, and provide for inservice education of personnel.

0 1 2 3

7. Ability to evaluate staff performance.

8. Ability to analyze and interpret legislation affecting adult education.

0 1 2 3

9. Ability to describe financial policies and practices in the field of adult education and to use them as guidelines for setting your own policies and practices.

0 1. 2 3

10. Ability to perform the role of change agent vis-à-vis organizations and communities utilizing educational processes.

0 1 2 3

11.

0 1 2 3

B. Regarding program administration:

1. Ability to design and operate programs within the frame-

0 1 2 3

Essential Competencies	Competency Scale
2. Ability to make and monitor financial plans and procedures.	0 1 2 3 4 5
3. Ability to interpret modern approaches to adult education and training to policy-makers convincingly.	0 1 2 3 4 5
4. Ability to design and use promotion, publicity, and public relations strategies appropriately and effectively.	0 1 2 3 4 5
5. Ability to prepare grant proposals and identify potential funding sources for them.	0 1 2 3 4 5
6. Ability to make use of consultants appropriately.	0 1 2 3 4 5
7. Ability and willingness to experiment with programmatic innovations and assess their results objectively.	0 1 2 3 4 5
8.	0 1 2 3 4 5
9.	0 1 2 3 4 5
10.	0 1 2 3 4 5

Permission to reproduce and use this rating scale is granted without limitation. Reports of results would be appreciated.

Malcolm S. Knowles
1506 Delmont Drive

Blocks to Effective Communication

1. Ordering, directing, commanding--telling the other person to do something; giving him/her a command.
2. Warning; admonishing, threatening. Telling the other person what consequences will occur if she/he does something; alluding to use of your power.
3. Moralizing, preaching. Telling another person what she/he ought to do.
4. Advising, giving suggestions or solutions. Telling the other person how to solve a problem, giving him/her advice or suggestions, providing answers or solutions.
5. Lecturing, teaching (this is not referring to a classroom situation), giving logical arguments. Trying to influence the other person with facts, counter-arguments, logic, information, or your own opinions.
6. Judging, criticizing, disagreeing, blaming. A negative judgment of your own opinions.
7. Praising (flattery), offering a positive judgment.
8. Name-calling, ridiculing, shaming. Making the other person feel foolish.
9. Interpreting, analyzing, diagnosing. Telling a person what his/her motives are, or analyzing why he or she is doing or saying something, or communicating that you have him/her figured out or diagnosed.
10. Reassuring, sympathizing, consoling. Trying to make the other person feel better, by talking him/her out of his/her feeling, trying to make the feeling go away, denying the strength of the feelings.
11. Probing, questioning, interrogating, trying to find reasons, motives, causes; searching for information.
12. Withdrawing, distracting, humoring. Trying to get the person away from the problem; withdrawing from the problem yourself; distracting the person, kidding him/her out of the feelings, pushing the problems aside.

Self Exploration: Questions to Get to Know Yourself By

1. Who am I?
2. Who am I deep down inside?
3. How do I reveal myself to others?
4. How do I feel about me?
5. Am I likeable?
6. How do I feel about me?
7. Am I likeable? shameful? worthwhile?
8. How do I meet my own needs?
9. How do I solve my own problems?
10. Do I blame others?
11. Who do I care about?
12. How do I show people that I care?
13. What do I care about?
14. What will I stand up and be counted for?
15. What are my basic values?
16. How do my values and beliefs influence my life?
17. How do I perceive the world? Is it fearful or fun?
18. What are my strengths? Of what am I the proudest about myself?
19. What do I like most about me?
20. What are my weaknesses? Do I know and respect my limits?
21. Is my balance--between work, play, self, and others--a healthy one?
22. What would I most like to change about myself?
23. What pleases me? How do I please myself? How do I find gratification? What do I enjoy?
24. What are my inner resources?
25. What do I fear? do I know why?
26. What do I strive for? Why is it so important to me?
27. How do I spend time? Do I use it, or kill it?
28. How do I handle my anger? Am I in touch with it?
29. Am I a "winner" or a "loser"? What makes me think so?
30. What do I think of my physical self?

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To: Doug Goodgame

From: Ann Lewis

Re: Course Developer Workshop

Date: 2-9-94

The workshop we discussed is scheduled for Friday, Feb. 11, beginning at 8:30am. As I understand it, the expense to TSTC-ETC for this workshop will be approximately $500.

This ~~con~~ workshop was set up following phone conversations with Mr. Goodgame — on site conversations with persons familiar with his product and with approval of Dr. J. Carnes

AL

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Survey Results

INSTRUCTOR RESPONSE

To: Competency-Based, Individualized, Self-Paced Education

Prepared by: Gregory B. McDaniel

Response:

Over the past year, I have served TSTC-ETC at Marshall in two separate but connected roles as an instructor. My primary role has been as a Mathematics instructor in the Pre-Technical Studies department. My other role has been as an adjunct Mathematics instructor for Panola College as part of the consortium by which Panola instructs TSTC-ETC's students in General Education, college-level coursework. These dual roles have provided me with the opportunity to observe the ability of our students from the Basic Mathematics level to the Plane Trigonometry level.

I have found competency-based, individualized, self-paced education the best way to go in our Pre-Tech Math classes. Many students would have failed if their particular course had not been self-paced. With the self-paced mode, they were allowed to make an incomplete and thus finish their course in more than one quarter. Also, many of our students have not taken a math course for several years. A lot of these students can complete their coursework fairly rapidly after just becoming familiar with mathematical concepts again.

Self-paced education is effective in all of our Pre-Tech Math courses. It is most effective at the Beginning Algebra level. It is least effective at the Intermediate Algebra level.

I do not use competency-based, individualized, self-paced education in my college-level courses (College Algebra and Plane Trigonometry). But, I have observed how it could be used in this setting. I would only want to use the self-paced mode in order to accelerate the students through the coursework. I feel as though students should have to complete a certain amount of work within a term in order for them to receive college credit. Thus, I can envision using an effective pre-test in order to place a student in an "accelerated" or a "regular" mode of instruction.

In summation, I will always push for us to use self-paced instruction in our Pre-Technical Studies Mathematics courses. In addition to this, I would like to pilot an accelerated program for our College Algebra classes.

TO: Ms Ann Lewis

FROM: Jack Miller

DATE: 25 July 94

SUBJECT: Instructor Evaluation of Competency Based, Self-Paced, Accelerated Learning in Pre-Tech Mathematics

For the past several months, I have utilized the competency based, self-paced, accelerated learning technique of instruction in three mathematics classes.

Overall, it is effective in enabling students to bridge the gap from their wide range of starting capabilities to the specified competencies required of the follow-on "customer courses", whether they are technical courses or higher level mathematics. In this respect, I have been very pleased with the results of this non-traditional approach. I have seen several students begin slowly (in fact, almost imperceptibly), but react well to the lack of pressure to "stay with the class", and then accelerate their pace of learning after mastering some mathematical or personal obstacle to progress. Often these accelerated students master the competencies well before the end of the established quarter, and are able to concentrate their efforts in other courses.

Of course, there has been the occasional person who did not stay on the theoretical schedule, or who did not conquer a hurdle and then move along quickly enough to catch-up and then finish the course within the 12 week quarter. For those in this category who were making conscientious efforts to learn and apply the required mathematical competencies, I designated the grade of "Incomplete", permitting them to return for whatever time it took to finish their learning during the following quarter. Conversely, for those whose effort was not conscientious, I rewarded them with the failing grade that they earned. There has not been one instance of a student stating that he or she was treated unfairly, or that the conscientiousness of his or her efforts had been misinterpreted. Therefore, I am very pleased with the aspect of this program that focuses on the individual's sense of responsibility for learning.

The concept of efficiency should be considered before implementation of this type of instruction. It is undeniable that one instructor cannot adequately facilitate the learning of as many self-paced students as an instructor in a more conventional lecture mode. This requires the dedication of more personnel resources than that to which a school may be accustomed, and may therefore be considered inefficient. However, the success rate with non-traditional students appears

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to be more than worth what might be considered by some to be the inefficient use of instructor resources.

As a final note, it becomes obvious after only a short exposure to competency based, self-paced, accelerated learning, that its success requires the assignment of instructors with well developed inter-personal skills, senses of responsibility, and flexibility of focus.

Teaching within a competency based, self-paced, accelerated learning environment for the past several months has caused me to realize the value of this style of learning/teaching, and I support further work to fine tune this technique for appropriate courses.

BRIDGE PROJECT
PRE-TECH ENGLISH
SUMMARY
By Cori Stanley

Having taught in both self-contained and competency-based, individualized programs, I see the value of both types of environments; there is a time and place for each. In my Pre-Tech English classes, I believe I have successful utilized both approaches.

Lecture and whole-class activities are necessary when introducing new concepts, administering tests, discussing assignments, and writing situations. Writing is a process which involves brainstorming and sharing ideas with others; peer responding is a necessary part of this process both for the writer and the responder. Many skills are incorporated in the writing process such as analyzing, making decisions, listening, speaking, etc.; this interaction would be lost in an individualized setting.

Competency-based objectives are extremely helpful when teaching remedial subjects. It enables the instructor to determine exactly what skills the student has and what is lacking; time is not lost repeating instruction on skills the student already possesses. Instead, all energies can be directed to providing the tools, materials, and instruction necessary to meet the student's needs. At the end of the quarter, the instructor can provide the student, counselor, or advisor with concrete information on the student's progress, what was completed, and what is still lacking. All parties involved know exactly what the student has achieved or still requires.

An individualized setting allows students to work at their own pace without the fear of failure or competition; they do what they can in the time allotted. If they cannot complete their work, they do not receive an "F", but are considered "I"n Progress and are allowed to continue their work until they do complete it. They, rather than the instructor, are accountable for their successor or failure.

The main problems I have encountered in an individualized setting are in student time management. Most of the students do no know how to prioritize their college schedule or tend to procrastinate. As a result, they are often caught in a "crunch" and find themselves playing "catch up" for the rest of the quarter.

Students react differently to these conditions. Many prefer the individualized approach and find it less stressful; others like the structured whole-group concept and find it keeps them "on track". However, it is important for students to be successful in both arenas.

BRIDGE PROJECT
PRE-TECH ENGLISH
SURVEY RESULTS

By Cori Stanley

INSTRUCTORS:

All instructors received the following survey. Only five instructors responded, as follows:

		Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
1.	Students showed improvement in reading.	1	2	2		
2.	Students showed improvement in writing.		3	2		
3.	Students showed improvement in understanding and following directions.		3	1	1	
4.	Students showed improvement in attitude toward education.		3	1	2	
5.	Students paid more attention.		4	2		
6.	Students were more productive.	1	2	1		
7.	Students made no significant progress.			1	3	1
8.	Pre-Tech English has been effective.	4	1	1		

In addition, the following comments were made on two surveys:

1. "Already had good attitude...responses based on one student and opinions of one other student."

2. "These questions do not really apply. Some of the TSTC students have terrible writing skills. Without the Bridge program, the Pre-Tech English, the less skilled students would not be able to satisfy writing requirements for any classes. Cori Stanley does a great job with the people who managed to avoid learning almost any grammar in their educational experience. I commend Cori for her hard work, perseverance, and success."

CONCLUSIONS:

Many of the instructors verbally expressed difficulty completing the survey because they may not have had the same student before and after Pre-Tech classes. This is not uncommon; most students take Pre-Tech before taking their program classes.

Most of the instructors have been very supportive of Pre-Tech and have encouraged their students to consult me regarding their assignments; I am frequently invited to observe and critique oral presentations and written reports required for program courses.

It is the general consensus of most of the faculty that Pre-Tech is a valued and necessary part of the students' education, particularly for those entering with limited skills.

STUDENTS:

All available, former Pre-Tech students received the following survey. (Current students were not included). Ten students responded as follows:

		Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
1.	I believe I have made improvement in reading.	1	7	2		
2.	I believe I have made improvement in writing.	3	6	1		
3.	I believe I have made improvement in understanding and following directions.	2	6	2		
4.	I believe I have made improvement in my attitude toward education.	3	5	2		
5.	I believe I pay more attention.	2	5	3		
6.	I believe I am more productive.	2	5	3		
7.	I have made no significant progress.			2	1	7
8.	Pre-Tech English has been effective.	3	6	1		

CONCLUSIONS:

The feedback received from students has been very favorable. Most of the students have seen the difference Pre-Tech has made in their college-level classes. As a result of Pre-Tech, a significant number of students have passed TASP their first try.

SUMMARY OF

INSTRUCTOR SURVEY:

PRE-TECH MATH BRIDGE PROJECT

Nine of TSTC-ETC at Marshall's Instructors were interviewed. These instructors were chosen based on the fact that they had been with the institution since the Fall of '93 or before. Also, at least one instructor was chosen from each of the six program areas.

These instructors were asked 6 different questions about Pre-Tech Math and were asked to give numerical ratings to these six questions. In addition to this, they were asked to give open responses to the questions.

The questions, ratings, and responses follow.

Question 1. How significant is math proficiency to a student's success in your program?

Rating mean = 3.8 with 4 representing highly

Some of the responses were:

"It is an absolute necessity for our higher-level courses."

"Math provides a process of thought."

Question 2. What level of mathematics is required for success in your program?

Rating mean = 3.2 with 3 representing College Algebra and 4 representing Trigonometry

Some of the responses were:

"Students must be able to manipulate formulas and solve quadratic equations from the first quarter on."

"Students must at least be able to use a handbook of formulas."

Question 3. In general, students who have not "needed" pre-tech math have performed how well in math-related aspects of your program?

Rating mean = 3.6 with 4 representing very well

Outside of the rating, there were no meaningful responses.

Question 4. In general, students who have "needed", but did not complete pre-tech math have performed how well in math-related aspects of the program?

Rating mean = 1.5 with 1 representing minimally

Some of the responses were:

"They have done a minimal job in math-related aspects."

"They have barely gotten by."

"You can tell a difference."

Question 5. In general, students who have "needed", and completed pre-tech math have performed how well in math-related aspects of the program?

Rating mean = 2.6 with 1 representing minimally and 4 representing very well

Some of the responses were:

"These students would never be going full-speed without pre-tech."

"It has given these students a chance."

Question 6. In your opinion, how significant is pre-tech math in preparing students for success in the math-related aspects of your program?

Rating mean = 3.7 with 4 representing highly

Some of the responses were:

"I can't imagine some students making it without pre-tech math."

"It is absolutely essential."

"Some students would never have a chance to get through our program and thus make a living without pre-tech."

SUMMARY OF

BRIDGE PROJECT
STUDENT SURVEY
OF PRE-TECH MATH

In order to evaluate our program from a student's perspective, we requested that our former Pre-Tech students completed a survey. They were asked to respond to 7 statements and to base their responses on their experiences in Pre-Tech Math.

28 students returned their surveys. The statements and the mean of the students' responses are recorded below.

Statements and Responses:

1. I believe I have made improvement in math.

mean = 1.9 with 1 representing strongly agree and 2 representing agree

2. I believe I have made improvement in understanding and following directions.

mean = 2.0 with 2 representing agree

3. I believe I have made improvement in my attitude toward education.

mean = 1.9 with 1 representing strongly agree and 2 representing agree

4. I believe I pay more attention.

mean = 2.1 with 2 representing agree and 3 representing no opinion

5. I believe I am more productive.

mean = 1.9 with 1 representing strongly agree and 2 representing agree

6. I have made no significant progress.

mean = 4.2 with 4 representing disagree and 5 representing strongly disagree

7. Pre-Tech Math has been effective.

mean = 2.1 with 2 representing agree and 3 representing no opinion

SUMMARY OF

BRIDGE PROJECT
STUDENT SURVEY
PRE-TECH MATH

In order to evaluate our program from a student's perspective, we requested that our former Pre-Tech students complete a survey. They were asked to respond to 7 statements and to base their responses on their experiences in Pre-Tech Math.

Six students from the Friday afternoon class responded. The statements and the mean of the students' responses are recorded below.

Statements and Responses:

1. I believe I have made improvement in math.

mean = 1.5 with 1 representing strongly agree and 2 representing agree.

2. I believe I have made improvement in understanding and following directions.

mean = 1.8

3. I believe I have made improvement in my attitude toward education.

mean = 1.5

4. I believe I pay more attention.

mean = 1.8

5. I believe I am more productive.

mean = 1.8

6. I have made no significant progress.

mean = 4.7 with 4 representing disagree and 5 representing strongly disagree.

7. Pre-Tech math has been effective.

mean = 1.3

Bridge Program Quarter

BRIDGE PROGRAM QUARTER SUGGESTIONS

The need for a Bridge Program quarter is based on low CPT scores. The CPT/TASP information sheet the student brings to the faculty advisor will direct you to enroll the student into specific academic courses. **If these scores indicate a need to start at MATH 050, ENGL 010, REA 020, a Pre-Tech quarter is advised.**

1 Cohorts start in Fall and Spring Quarters, but a first time enrollee in either of those quarters (and needing Pre-Tech courses) will have two quarters to concentrate on Pre-Tech courses before joining the next official cohort. This student would enter the cohort with some program courses completed as they were taken as options during Bridge Program quarters.

2. First time enrollees entering Winter or Summer quarters may have only one Bridge Program quarter and be ready to join the next cohort. This student may enter the cohort still needing some Pre-Tech courses but would still be better prepared than without one Bridge Program quarter.

   NOTE: Students can register for two courses of the same subject at the same time. Because the work is individualized and students work at their own pace, they can work both class times on one course for half of the quarter, complete that course, then work during both class times on the second course. They do need to register for both courses and come both class times.

3. If the student's CPT report indicates a need for reading remediation starting at the REA 020 course, he/she should be scheduled for both REA 020 and 030 to get their reading skills improved as fast as possible as that impacts every other course they take.

4. Make a serious attempt to complete Pre-Tech needs (except TASP classes, 090 classes) prior to beginning the 3rd quarter. To do this, consider where they start in math and count the courses needed. If starting at 050, and all goes well, they will need to double up in math as there are **4** quarters of Pre-Tech math, 050, 060, 070, 104, needed to be ready for College Algebra.

   There are four Pre-Tech math courses, two Pre-Tech writing and two Pre-Tech reading courses, so plan accordingly.

M E M O

To: TSTC-ETC Faculty: CHT, INT, MET, OSH, PET and their options

From: Ann Lewis

Re: Pre-Tech Immersion Quarter

Date: 6-30-94

In addition to the regular Pre-Tech courses, we will offer immersion, block time Bridge Program Fall quarter.

The immersion Bridge quarter is for students whose CPT scores indicate they need to start at the lowest level of Math and English (MATH 050 and ENGL 010 or REA 020). In this arrangement the student will concentrate on remediation in a daily exposure schedule rather than once a week. Thus:

MATH	MTWTF 8:00am to 9:50am,
ENGL	MTWT 11:00am to 11:50, and/or
REA	MTWTF 10am to 11:50am.

(Orientation will be offered Fri, 11:00 to 11:50am.)

This will take an intensive effort on the part of the student, so the student must understand the focus is on preparing to be successful, rather than beginning immediately in "real" courses. Your older students will probably be most successful in this program. Recent high school graduates may not have enough motivation to hang in there and be committed to a remediation effort.

THE BIG PICTURE--Progression of PTS Courses

REA 020	ENGL 010	MATH 050	
REA 030	ENGL 020	MATH 060	
and	and	MATH 070	MATH 101
Pass TASP	Pass TASP	MATH 104	
		and	
	Ready for	Pass TASP	
	ENGL 1301		
		Ready for	
		MATH 1314	

TO REGISTER STUDENTS IN THE IMMERSION BRIDGE PROGRAM

The goal is to register students for four Pre-Tech courses to be taken 8am to 12 noon, Monday through Friday to provide a concentrated effort to build the skills needed.
The students will be registered in two Pre-Tech math and two Pre-Tech English courses.

Both of these:

MATH 050	M1	2-3-3	RM 108	MTWTF	8:00am-8:50am
MATH 060	M1	2-3-3	RM 108	MTWTF	9:00am-9:50am

Register the student for **both MATH 050 and MATH 060**

These students will work the two hours each day on 050 until that is done, then continue on into 060. (Hopefully also complete 070 and be ready for Intermediate Algebra Winter quarter.

AND

ENGL 010	M1	1-3-2	RM 108	MTWT	10:00am-10:50am
ENGL 020	M1	1-3-3	RM 108	MTWT	11:00am-11:50am

Total 11 credit hours

AND/OR

REA 020	MI	2-3-3	RM 108	MTWTF	10:00am-10:50am
REA 030	M1	2-3-3	RM 108	MTWTF	11:00am-11:50am

Instead of or along with ENGL, depends on need.

Register the students for **two** of the above ENGL or REA courses. If reading is needed, register for one REA and one ENGL course. Example: REA 030 and ENGL 010 The students will work on these simultaneously as the instructor directs.

The plans are to have an additional ORI 102 section from 11-12 on Fridays. This would make the required 12 credits for full time student status.

Students who are in this program can take a 3 credit "real" course in the afternoon.

BRIDGE PROGRAM QUARTER

PRE-ELECTRONICS CORE (INT)

QUARTER 1

Course #	Title	Credits/Hours	
MATH 050	Basic Mathematics	3	5
MATH 060	Beginning Algebra I	3	5
REA 020	Reading Improvement II	3	5
REA 030	Reading Improvement III	3	5
ENGL 010	Writing Skills I	2	4
ENGL 020	Writing Skills II	3	4

OPTIONS Courses not requiring high level math or English skills

ORI 102	Introduction to College	1	1
BUS 101	Basic Keyboarding	2	4
IMT 2060	Applications Software	3	6
EEC 1001	DC Circuits I	3	6
EEC 1002	DC Circuits II	4	10
DDT 104	Drafting Principles (If no drafting in high school)	3	6

QUARTER 2

MATH 070	Beginning Algebra II	3	5
MATH 104	Intermediate Algebra	3	5

any REA or ENGL courses not completed 1st Quarter

If the CPT/TASP information sheet indicates a student needs MATH 050, that student could be enrolled in 050 and 060 the first quarter, then 070 and 104 the second quarter.

If the CPT/TASP information sheet indicates a student needs REA 020 and ENGL 010, the student will need four Pre-Teach English classes (two reading and two writing) -- so, they could register for all four the first quarter or one of each for the first and second quarters.

BRIDGE PROGRAM QUARTER

PRE-CHEMISTRY CORE (CHT, COT)

QUARTER 1

Course	#	Title	Credits/Hours	
MATH	050	Basic Mathematics	3	5
MATH	060	Beginning Algebra I	3	5
REA	020	Reading Improvement II	3	5
REA	030	Reading Improvement III	3	5
ENGL	010	Writing Skills I	2	4
ENGL	020	Writing Skills II	3	4

OPTIONS Courses not requiring high level math or English skills

ORI	102	Introduction to College	1	1
BUS	101	Basic Keyboarding	2	4
IMT	2060	Applications Software	3	6
EPT	120	Applied Electricity	4	6
CHT	102	Applied Chemistry (prq. MATH 060) (if have not had high school chemistry)	4	6

QUARTER 2

MATH	070	Beginning Algebra II	3	5
MATH	104	Intermediate Algebra	3	5

any REA or ENGL courses not completed 1st Quarter

If the CPT/TASP information sheet indicates a student needs MATH 050, that student could be enrolled in 050 and 060 the first quarter, then 070 and 104 the second quarter.

If the CPT/TASP information sheet indicates a student needs REA 020 and ENGL 010, the student will need four Pre-Tech English classes (two reading and two writing) -- so, they could register for all four the first quarter or one of each for the first and second quarters.

BRIDGE PROGRAM QUARTER

PRE-ENGINEERING CORE (MET, PET, Plastics Option)

QUARTER 1

Course #	Title	Credits/Hours	
MATH 050	Basic Mathematics	3	5
MATH 060	Beginning Algebra I	3	5
REA 020	Reading Improvement II	3	5
REA 030	Reading Improvement III	3	5
ENGL 010	Writing Skills I	2	4
ENGL 020	Writing Skills II	3	4

OPTIONS Courses not requiring high level math or English skills

ORI 102	Introduction to College	1	1
BUS 101	Basic Keyboarding	2	4
IMT 2060	Applications Software	3	6
OSH 216	Safety and Accident Protection	3	5
DDT 104	Drafting Principles	3	6
MET 100	Machine Tool Practices (1st qtr.)	6	12
WLT 105	Survey of Welding Practices and Apps.	3	7

QUARTER 2

MATH 070	Beginning Algebra II	3	5
MATH 104	Intermediate Algebra	3	5

any REA or ENGL courses not completed 1st Quarter

If the CPT/TASP information sheet indicates a student needs MATH 050, that student could be enrolled in 050 **and** 060 the first quarter, the 070 **and** 104 the second quarter.

If the CPT/ TASP information sheet indicates a student needs REA 030 **and** ENGL 010, the student will need four Pre-Tech English classes (two reading and two writing)-- so, they could register for all four the first quarter **or** one of each for the first and second quarters.

BRIDGE PROGRAM QUARTER

PRE-ENVIRONMENTAL CORE (OSH, Hazardous Materials Option)

QUARTER 1

Course	#	Title	Credits/Hours	
MATH	050	Basic Mathematics	3	5
MATH	060	Beginning Algebra I	3	5
REA	020	Reading Improvement II	3	5
REA	030	Reading Improvement III	3	5
ENGL	010	Writing Skills I	2	4
ENGL	020	Writing Skills II	3	4

OPTIONS Courses not requiring high level math or English skills

ORI	102	Introduction to College	1	1
BUS	101	Basic Keyboarding	2	4
IMT	2060	Applications Software	3	6
OSH	101	Introduction to Hazardous Materials Mgt.	3	5
OSH	102	Safety Program, Organization, Admin. 3	3	
OSH	103	Fundamentals of Fire Protection	3	3
OSH	104	Safety and Health Stds, Regs, and Codes	3	5
OSH	106	Safety Planning, Layout, Arrangements	3	5
OSH	302	Construction Safety and Health	3	3
OSH	201	Workers' Comp. and Industrial Insurance	3	3
CHT	102	Applied Chemistry (prq. MATH 060)	4	6

QUARTER 2

MATH	070	Beginning Algebra II	3	5
MATH	104	Intermediate Algebra	3	5

any REA or ENGL courses not completed 1st Quarter

If the CPT/TASP information sheet indicates a student needs MATH 050, that student could be enrolled in 050 and 060 the first quarter, then 070 and 104 the second quarter.

If the CPT/TASP information sheet indicates a student needs REA 020 and ENGL 010, the student will need four Pre-Tech English classes (two reading, RES 020 and 030, ENGL 010 and 020) -- so he/she could register for all four the first quarter or one of each for the first and second quarter.

M E M O

To: TSTC-ETC Faculty: IMM

From: Ann Lewis

Re: Bridge Program Immersion Quarter

Date: 6-30-94

In addition to the regular Pre-Tech courses, we will offer immersion, block time Bridge Program Fall quarter.

The immersion Bridge quarter is for students whose CPT scores indicate they need to start at the lowest level of Math and English (MATH 050 and ENGL 010 or REA 020). In this arrangement the student will concentrate on remediation in a daily exposure schedule rather than once a week. Thus:

MATH	MTWTF 8:00am to 9:50am,
ENGL	MTWT 11:00am to 11:50, and/or
REA	MTWTF 10am to 11:50am.

(Orientation will be offered Fri., 11:00 to 11:50am.)

This will take an intensive effort on the part of the student, so the student must understand the focus is on preparing to be successful, rather than beginning immediately in "real" courses. Your older students will probably be most successful in this program. Recent high school graduates may not have enough motivation to hang in there and be committed to a remediation effort.

THE BIG PICTURE--Progression of PTS Courses

REA 020	ENGL 010	MATH 050
REA 030	ENG 107	MTH 115

TO REGISTER STUDENTS IN THE BRLIDGE IMMERSION PROGRAM

The goal is to register students for four Pre-Tech courses to be taken 8am to 12 noon, Monday through Friday to provide a concentrated effort to build the skills needed.

Both of these:

MATH 050	M1	2-3-3	RM 108	MTWTF	8:00am-8:50am
MTH 115	M1	3-2-4	RM 108	MTWTF	9:00am-9:50am

Register the student for **both MATH 050 and MTH 115**

These students will work the two hours each day on 050 until that is done, then continue on into 115.

AND TWO of the following:

ENGL 010	M1	1-3-2	RM 108	MTWT	10:00am-10:50am

Total 9 credit hours

AND/OR

REA 020	MI	2-3-3	RM 108	MTWTF	10:00am-10:50am
REA 030	M1	2-3-3	RM 108	MTWTF	11:00am-11:50am

If the student needs reading, register him/her for the recommended REA course **and** ENGL 010. If the student only needs ENGL 010, register them for only that course using the 10am time and he/she will be able to take some other course the fourth hour or use it for study time.

This would complete your math requirements and qualify these students for ENG 107 the following quarter.

The plans are to have an additional ORI 102 section from 11-12 on Fridays.

Students who are in this program can take a 3 credit "real" course in the afternoon.

BRIDGE PROGRAM QUARTER

PRE-MECHANICS CORE (IMM)

QUARTER 1

Course	#	Title		Credits/Hours	
MATH	050	Basic Mathematics		3	5
REA	020	Reading Improvement II		3	5
REA	030	Reading Improvement III		3	5
ENGL	010	Writing Skills I		2	4

OPTIONS Courses not requiring high level math or English skills

ORI	102	Introduction to College		1	1
BUS	101	Basic Keyboarding		2	4
IMT	2060	Applications Software		3	6
IMM	103	Mechanical Power Transmission		3	6
OSH	216	Safety and Accident Prevention	3	5	
PSY	112	Human Relations		3	4
WLT	105	Welding Practices and Applications		4	6

QUARTER 2

MATH	115	Occupational Mathematics	4	5
ENG	107	Oral and Written Communications	3	3

If the CPT/TASP information sheet indicates a student needs MATH 050, that student could be enrolled in MATH 050 and MTH 115 the first quarter.

If the CPT/TASP information sheet indicates a student needs REA 020 and ENGL 010, the student will need three Pre-Tech English classes (two reading, REA 020 and 030, and one writing, ENGL 010) and ENG 107.

Model Curriculum

PRE-TECHNICAL STUDIES
FACULTY LIST
Summer 1994

Elizabeth Ann Lewis, Program Director.
Carl Perkins Discretionary Grant--Bridge Program
Employed, 8-92
Masters of Arts, Education Leadership
Bachelors of Arts, Education, Recreation
Fifteen years experience in management/development of computer-based, individualized instruction
1993-94: Instructor. Developed individualized instruction for developmental mathematics courses.

Gregory B. McDaniel, Mathematics Instructor
Employed, 8-93
Masters of Science, Secondary Education
Eighteen graduate credits hours in Mathematics
Bachelor of Science, Mathematics

Courses: Basic Mathematics, Beginning Algebra, Introductory Algebra, Intermediate Algebra, Occupational Mathematics, TASP Remediation/Math

Corinda Stanley, Reading/Writing/English Instructor
Employed 8-93
Bachelor of Arts, English/Speech and Theatre
Currently working on PhD Education, projected awarded Sp. 95
Committees: Computer Committee, PTS Advisory Committee, Grant Task Force.

Courses: Reading Improvement II&III, Writing Skills I&II, Oral and Written Communication, Interpersonal Communication, TASP Remediation/reading & writing

John E. Miller, Mathematics Instructor (also PET)
Employed, Fall 1992
Bachelors of Science, Industrial Distribution (Half Industrial Engineering, half Industrial Management)

Courses: Basic Mathematics, Beginning Algebra, Introductory Algebra, Intermediate Algebra, Occupational Mathematics, TASP Remediation/Math, Applications Software

Mathematics

STUDENT COMPETENCY PROFILE

NAME____________________________
S.S.#____________________________
DATE____________________________

COMPETENCY STATEMENT	MASTERY		
MATH	Mastery Level	Date	Initials
WHOLE NUMBERS			
1. Read and count single and multiple digit whole numbers.			
2. Write whole numbers from oral statement and written text (six thousand three = 6003).			
3. Round off single and multiple digit whole numbers.			
4. Add single and multiple digit whole numbers.			
5. Subtract single and multiple digit whole numbers.			
6. Multiply single and multiple digit whole numbers.			
7. Divide single and multiple digit whole numbers.			
8. Perform arithmetic operations using correct order of operations.			
9. Use arithmetic operations to solve work problems with whole numbers.			
FRACTIONS			
10. Read and write common fraction with understanding of relative size.			
11. Add like common fractions.			
12. Subtract like common fractions.			
13. Multiply common fractions.			
14. Divide common fractions.			
15. Add unlike fractions.			
16. Subtract unlike fractions.			
17. Simplify fractions to solve problems.			

18. Solve word problems with common fractions.			
19. Reduce fractions to lowest terms.			
20. Find lowest common denominator.			
21. Change fractions from denominator to another.			
22. Translate a mixed number into an improper fraction and reverse.			
23. Perform computations with mixed numbers.			
DECIMALS			
24. Understand relative size of decimal numbers.			
25. Write digit equivalent of orally stated decimal number.			
26. Read and write decimals with one or more places.			
27. Add and subtract decimals with one or more places.			
28. Multiply decimals with one or more places.			
29. Divide decimals with one or more places.			
30. Carry out arithmetic computations involving dollars and cents.			
31. Convert fraction to decimal equivalent and vice versa.			
32. Solve word problems with decimals in one or more places.			
33. Read and write percents.			
34. Find the percents of a number.			
35. Find the number when a percent is given.			
36. Compute percent of increase.			
37. Compute percent of decrease.			
38. Solve word problems involving percent.			
MIXED OPERATIONS			
39. Convert mixed numbers to decimals and decimal fractions to mixed numbers.			
40. Solve word problems containing a mix of fractions and decimal numbers.			
41. Compute averages.			

42. Solve basic ratio problems.			
43. Solve proportion problems with one or two unknowns.			
44. Reduce ratios to lowest terms.			
45. Utilize ratio and proportion to solve word problems.			
MEASUREMENT AND CALCULATION			
46. Perform conversions within metric system (weight, distance, volume)			
47. Use metric and customary units of measurements.			
48. Solve problems involving time, weight, distance and volume.			
49. Rename large and small numbers using scientific notation.			
50. Use scientific notation to solve problems.			
51. Use a calculator to perform basic arithmetic operations.			
52. Use a calculator to solve problems using scientific notation.			
53. Graph data using bar, line and pie graphs.			
ESTIMATION			
54. Determine if a solution to a mathematical problem is reasonable.			
55. Estimate distances in inches, feet, yards and miles.			
ALGEBRA			
56. Find missing addends.			
57. Find missing factors.			
58. Collect like terms in an algebraic expression.			
59. Add and subtract algebraic expressions.			
60. Multiply and divide algebraic expressions.			
61. Solve linear equations in one variable.			
62. Solve linear inequalities.			
63. Solve systems of linear equations.			
64. Construct graphs on coordinate plane.			

65. Find factors and multiples.			
66. Factor algebraic expressions and equations.			
67. Add, subtract, multiply and divide algebraic fractions.			
68. Add, subtract, multiply and divide square roots.			
69. Use exponents and square roots appropriately.			
70. Use direct and inverse variation to solve word problems.			
71. Solve quadratic equations by square roots, factoring, completing the square and using the quadratic formula.			
GEOMETRY			
72. Use geometry elements (point, line, ray, etc) to label drawings.			
73. Use appropriate formula to determine length, width, circumference, area, and volume.			
74. Recognize and name types of angles.			
75. Recognize and name geometric figures.			
76. Use Pythagorean Theorem to find missing measures of a triangle.			
77. Find sine, cosine and tangent of an angle using a table and calculator.			
78. Solve problems to find length of sides and angles of geometric shapes.			
PRACTICAL MATHEMATICS			
79. Use formula to convert Fahrenheit, Celsius, and Kelvin temperatures.			
80. Rearrange symbols in equations to isolate specific unknowns.			
81. Solve problems by substituting given numerical values for symbols in a formula.			
82. Identify mode, median, and mean.			
83. Find measures of central tendency (mode, median, mean).			
84. Construct graphs from gathered data.			
85. Interpret graphs and analyze data presented.			

COMPETENCY/RESOURCE MATRIX

TEXTS
MATHEMATICS FOR THE TRADES = MT
WORKING WITH NUMBERS, ALGEBRA = WN

COMPUTER PROGRAMS
SPECIAL TOPICS = ST
QUEUE ALGEBRA = Q
JOB SKILLS EDUCATION PROGRAM = JS

COMPUTER PROGRAM
SKILLS BANK = SB
COMPUTATION = CM
CONCEPTS = CN
WORD PROBLEMS = WP
GEOMETRY/ALGEBRA = GA

COMPETENCY STATEMENT	RESOURCES						
MATH	MT	WN	JS	SB	ST	Q	COURSE TARGET
WHOLE NUMBERS							
1. Write whole numbers from oral statement and written text (six thousand three = 6003).	Intro ch 1		1a				050
2. Add and subtract single and multiple digit whole numbers.	1-1 1-2		12a 12b	CM 1,2			050
3. Multiply and divide single and multiple digit whole numbers.	1-3 1-4		13a	CM 3,4			050
4. Use arithmetic operations to solve work problems with whole numbers.	1-1 1-2 1-3 1-4		12a 12b	WP 1-7			050
5. Read and count single and multiple digit whole numbers.	Intro ch 1		1h				050
6. Round off single and multiple digit whole numbers.	3-2		1g	CN 4			050

7. Perform arithmetic operations using correct order of operations.	1-5		16c	GA 17			050
8. Solve word problems with whole numbers.	1-1 1-2 1-3 1-4		12a 12b	WP 1-7			050
FRACTIONS							
9. Read and write common fraction with understanding of relative size.	2-1		14g				050
10. Add and subtract common fractions.	2-4		14e	CM 9,12			050
11. Multiply and divide common fractions.	2-2 2-3		14f	CM 15			050
12. Solve word problems with common fractions.	2-1 2-2 2-3 2-4		14e 14f				050
13. Reduce fractions to lowest terms.	2-1		14b 14f				050
14. Find lowest common denominator.	2-1		14e	CN 9			050
15. Change fractions from denominator to another.	2-1		14e	CM 10			050
16. Translate a mixed number into an improper fraction and reverse.	2-1		14b 14f				050
DECIMALS							050
17. Understand relative size of decimal numbers.	3-1		1f				050

18. Carry out arithmetic computations involving dollars and cents.	3-1		1f	GA 18			050
19. Read and write decimals with one or more places.	3-1		1a	CN 1			050
20. Multiply and divide decimals with one or more places.	3-2		13b	CM 7,8			050
21. Add and subtract decimals with one or more places.	3-1		12c	CM 5,6			050
22. Solve word problems with decimals in one or more places.	3-1 3-2		12c				050
23. Write digit equivalent of orally stated decimal number.	3-1		1f				050
24. Convert fraction to decimal equivalent and vice versa.	4-1		14c	WP 24			050
25. Convert decimal equivalent and vice versa.	4-1		14c 14d	WP 10			050
26. Read and write percents.	4-1		14d				050
27. Compute percents.	4-2		14d	CN 11-17			050
MIXED OPERATIONS							
28. Convert mixed numbers to decimals and decimal fractions to mixed numbers.	3-3		14c 14d				050
29. Solve word problems containing a mix of fractions and decimal numbers.	3-3		14c 14d	WP 24			050
30. Compute averages.	3-2		16b	WP 23			050

31. Solve basic ratio problems.	7-5		16g	WP 10	ratio & prop ratio		060 115
32. Solve proportion problems with one or two unknowns.	7-5		16g	WP 11-13	ratio & prop ratio		060 115
33. Reduce ratios to lowest terms.	7-5		16g	WP 10			060 115
34. Utilize ratio and proportion to solve word problems.	7-5		16g	WP 13	ratio & prop. word prob.		060 115
MEASUREMENT AND CALCULATION							
35. Perform conversions within metric system (weight, distance, volume).	5-1		16d 16f				050
36. Solve problems involving time, weight, distance and volume.	5-2 5-3		12e 14a	GA 2,3			115 050
37. Rename large and small numbers using scientific notation.	7-7			GA 15	scien. not.		060
38. Use scientific notation to solve problems.	7-7				scien. not.		060
39. Use a calculator to perform basic arithmetic operations.	1-1 1-2 1-3		18c				050
40. Use a calculator to solve problems using scientific notation.	7-7		18c		scien. not.		060
41. Use formulas appropriately.	7-1 7-3		16h 18a				060 115
42. Graph data using bar, line and pie graphs.				GA 8,9			050
ESTIMATION							

43. Determine if a solution to a mathematical problem is reasonable.	1-1		12h 13e	CN 5			050
44. Estimate distances in inches, feet, yards and miles.	5-4		2 g				050
ALGEBRA							060 115 070 101 104
45. Add, subtract, multiply and divide algebraic expressions.	7-2 7-6	p. 79-81		GA 17			060 115 070 101 104
46. Solve linear equations in one variable.	7-3	p. 48-67				1	060 115 070 101 104
47. Solve linear inequalities.		p. 119-121					070 010 104
48. Solve systems of linear equations.	11-2	p. 100-115				5	070 101 104
49. Construct graphs on coordinate plane.		p. 95-97				4	070 101 104

50. Find factors and multiples.		p. 138-157				6	070 101 104
51. Factor algebraic expressions and equations.		p. 138-157				6	070 101 104
52. Add, subtract, multiply and divide algebraic fractions.		p. 78,82 83					070 101 104
53. Add, subtract, multiply and divide square roots.		p. 126-129		GA 14			070 101 104
54. Use exponents and square roots appropriately.	6-4			GA 14			060 115
55. Use direct and inverse variation to solve word problems.	7-5		16 g		ratio& prop.		060 115
56. Solve quadratic equations by square roots, factoring, completing the square and using the quadratic formula.	11-3	p. 142-159				7	070 101 104
GEOMETRY							060 115
57. Use geometry elements (point, line, ray, etc) to label drawings.	8-1		7a	GA 4			060 115
58. Use appropriate formula to determine length, width, circumference, area, and volume.	8-2 8-3 8-4 9-1 9-2		15f 15g 15h 15i	GA 7			060 115

59. Recognize and name types of angles.	8-1		9 a	GA 5			060 115
60. Recognize and name geometric figures.	8-1		8a				060 115
61. Find sine, cosine and tangent of an angle using a table and calculator.	10-1		19d				115
62. Solve problems to find length of sides and angles of geometric shapes.	8-3 10-3						060 115
PRACTICAL MATHEMATICS							050 060 115
63. Use formula to convert Fahrenheit, Celsius, and Kelvin temperatures.	5-3		16 f	GA 20			050 115
64. Rearrange symbols in equations to isolate specific unknowns.	7-3		18 a				060 115
65. Solve problems by substituting given numerical values for symbols in equations.	7-1		18 a				060 115
66. Find measures of central tendency (mode, median, mean).				WP 23			050
67. Use metric and customary units of measurements.	5-3		16 f				050 115
68. Construct graphs from gathered data.			16 e	GA 8,9			050
69. Interpret graphs and analyze data presented.			16 e	GA 8,9			050

PRE-TECH MATH

MATH 050
BASIC MATHEMATICS (2-3-3)

The purpose of this course is to give background in the fundamentals of mathematics. It includes the very basic concepts of whole numbers, number theory, fractions, decimals, percentages, scientific notation and measurements. Prerequisite: Placement determined by MATH placement test. (Developmental/No college credit granted)

MATH 060
BEGINNING ALGEBRA I (2-3-3)

The purpose of this course is to give a background in pre-algebra and elementary algebraic concepts. It includes the concept of signed numbers, evaluating expressions, polynomials, operations with algebraic expressions, and factoring. Prerequisite: MATH 050, or MATH placement test. (Developmental/No college credit granted)

MATH 070
BEGINNING ALGEBRA II (2-3-3)

This course is a continuance of MATH 060, Beginning Algebra I. It begins with rational expression, followed by linear and quadratic equations, formulas and work problems. A basic geometry section will also be included. Prerequisite: MATH 060(Developmental/No college credit granted)

MATH 090
MATH TASP REVIEW (0-2-1)

An intensive review of mathematics for students who have not passed the math portion of the TASP. Instruction is focused on individual needs, employing computer software and videotape study guides. Instruction is presented through lecture and experience in the developmental and/or math labs.

MATH 101 *(MATH 060 AND 070 -- 101 split for 2 qtrs)*
INTRODUCTORY ALGEBRA (2-3-3)

An introductory algebra course covering operations involving real numbers, poly-nominals and rational expressions; solutions of linear equations and formulas; and factoring. Placement determined by MATH placement test. (Developmental/No college credit granted)

MATH 1312 OR 104
INTERMEDIATE ALGEBRA (4-0-3)

A study of relations and functions; inequalities; factoring; polynomials; rational expressions and quadratics with an introduction to complex numbers; exponential and logarithmic functions; determinants and matrices; sequences and series. Prerequisite: MATH 101 or equivalent as determined by MATH placement test. (Developmental/No college credit)

BOOK LIST
PRE-TECH MATHEMATICS

*****

Carman, R.A. and Saunders, H.M., *Mathematics for the Trades,* (Third Edition), 1993, Regents/Prentice Hall, Englewood Cliffs, New Jersey.

Drooyan, I., and Carico, C.C., *Trigonometry: An Analytical Approach,* (Sixth Edition), 1991, Macmillan Publishing Company, New York.

*****

Keedy, M.L., Bittinger, M.L., and Beecher, J.A., *Developmental Mathematics*, (Third Edition), 1993, Addison-Wesley Publishing Company, Reading, Massachusetts.

Larson, R.E. and Hostetler, R.P., *College Algebra*, (Third Edition), 1993, D.C. Heath and Company, Lexington, Massachusetts.

*****

Michels, L., *A Basic Math Approach to Concepts of Chemistry,* (Fourth Edition), 1990, Brooks/Cole Publishing Company, Pacific Grove, California.

*****

Shea, James T., *Working with Numbers, Algebra,* 1990, Steck-Vaughn Company, A Subsidiary of National Education Corporation.

Streeter, J., Hutchison, D., and Hoelzle, L., *Beginning Algebra, Form A,* (Third Edition), 1993, McGraw-Hill, Inc., New York.

Texas State
Technical College
Waco/Marshall

COURSE SYLLABUS

Basic Mathematics
Title

MATH 050
Number

Math Placement Test
Prerequisite

Greg McDaniel
Prepared by

Approved by

6-9-94
Date

This Syllabus has been reviewed and is current on date indicated.

Reviewed by	Date

Texas State
Technical College
East Texas Center at Marshall

Course Syllabus

I. COURSE DESCRIPTION (catalog description)

DEPARTMENT: Pre-Technical Studies

COURSE: Math 050 Basic Mathematics (2-3-3)
The purpose of this course is to give a background in the fundamentals of mathematics. It includes the very basic concepts of whole numbers, number theory, fractions, decimals, percentages, scientific notation and measurements.

PREREQUISITE: Placement determined by MATH placement test. (Developmental/No college credit granted)

II. COURSE GOALS AND OBJECTIVES:

GOAL 1: Perform operations and applications with whole numbers

Obj. 1a: Perform the four basic operations with whole numbers.

Sub-obj. 1a(1): Define whole numbers.
Sub-obj. 1a(2): Demonstrate the understanding of the place-value of whole numbers.
Sub-obj. 1a(3): Add whole numbers.
Sub-obj. 1a(4): Use the concept of estimation to check the reasonableness of answers.
Sub-obj. 1a(5): Subtract whole numbers.
Sub-obj. 1a(6): Multiply by zero and one.
Sub-obj. 1a(7): Multiply whole numbers.
Sub-obj. 1a(8): Divide whole numbers.
Sub-obj. 1a(9): Follow the correct order of operations.
Sub-obj. 1a(10): Solve word problems involving whole numbers.

Obj. 1b: Use the four basic operations of whole numbers to solve number theory problems.

Sub-obj. 1b(1): Recognize prime and composite numbers.
Sub-obj. 1b(2): Find the factors of whole numbers.

GOAL 2: Perform operations and applications with fractions.

Obj. 2a: Multiply and divide fractions.

Sub-obj. 2a(1): Define numerator and denominator.
Sub-obj. 2a(2): Use proper and improper fractions.

Sub-obj. 2a(3): Find equivalent fractions.
Sub-obj. 2a(4): Write a fraction in lowest terms.
Sub-obj. 2a(5): Compare fractions.
Sub-obj. 2a(6): Multiply fractions.
Sub-obj. 2a(7): Divide fractions.

Obj. 2b: Add and subtract fractions.

Sub-obj. 2b(1): Add and subtract fractions with like denominators.
Sub-obj. 2b(2): Find the least common denominator.
Sub-obj. 2b(3): Add and subtract fractions with unlike denominators.
Sub-obj. 2b(4): Solve word problems involving fractions.

Goal 3: Perform operations and applications with decimal numbers.

Obj. 3a: Perform the four basic operations with decimal numbers.

Sub-obj. 3a(1): Demonstrate the understanding of the place value of decimal numbers.
Sub-obj. 3a(2): Define decimal digits.
Sub-obj. 3a(3): Add decimal numbers.
Sub-obj. 3a(4): Subtract decimal numbers.
Sub-obj. 3a(5): Multiply decimal numbers.
Sub-obj. 3a(6): Divide decimal numbers.

Obj. 3b: Use the four basic operations to solve problems with decimal numbers.

Sub-obj. 3b(1): Round decimal numbers.
Sub-obj. 3b(2): Compute the average of a set of numbers.
Sub-obj. 3b(3): Change fractions to decimals.
Sub-obj. 3b(4): Solve word problems involving decimal numbers.

Goal 4: Perform operations and applications with percents.

Obj. 4a: Apply the definition of percent to fractions and decimals.

Sub-obj. 4a(1): Define percent.
Sub-obj. 4a(2): Change decimal numbers to percents.
Sub-obj. 4a(3): Change fractions to percents.
Sub-obj. 4a(4): Change percents to decimal numbers.

Obj. 4b: Solve problems involving percent.

Sub-obj. 4b(1): Find the percent of a number.
Sub-obj. 4b(2): Find the percentage one number is of another number.
Sub-obj. 4b(3): Find the total when the percent of a number and the percentage are known.
Sub-obj. 4b(4): Solve word problems involving percent.

Goal 5: Be able to use the basic concepts of scientific notation.

Obj. 5a: Acquire basic skills in the area of scientific notation.

Sub-obj. 5a(1): Demonstrate the understanding of the concepts of scientific notation.
Sub-obj. 5a(2): Convert a number from decimal form to scientific notation.
Sub-obj. 5a(3): Convert a number from scientific notation to decimal form.

Goal 6: Use measurements in a program-specific area.

Obj. 6a: Make measurement conversions.

Sub-obj. 6a(1): Add and subtract measurement numbers.
Sub-obj. 6a(2): Multiply and divide measurement numbers.
Sub-obj. 6a(3): Round measurement numbers.
Sub-obj. 6a(4): Convert measurements of time, length, weight, capacity, area and volume.
Sub-obj. 6a(5): Change English to metric units.
Sub-obj. 6a(6): Change metric to English units.

Obj. 6b: Perform program-specific direct measurements.

III. COURSE OUTLINE

Lecture/Lab

Students enrolled in Math 050 are scheduled in class for a period of 2 lecture hours per week and 3 lab hours per week.

Pre-Technical Studies is a self-paced, individualized program. For each course, students are given a diagnostic pre-test, a set of assignments over objectives they have not yet mastered (based on the diagnostic pre-test), and a comprehensive course mastery test.

In addition to scheduled lectures, one-on-one time with the instructor (based on the individual student's need) is considered to be part of the 2 hours of lecture per week.

CONTENT:

The content of the course is contained on the following pages.

Math 050

Course Progres Record

		Grade	Date Completed
Pre-Test			________
Unit 1	Whole Numbers..............	________	________
Unit 2	Fractions..................	________	________
Unit 3	Decimals...................	________	________
Unit 4	Percents...................	________	________
Unit 5	Measurements...............	________	________
	Course Grade.........	________	________

Math 050

Assignment Completion Record

Unit 1 (CHT) Arithmetic of Whole Numbers

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zcht0501 ***

Computer: Skills Bank II

Grade Date Completed

JSEP Lessons:
1h Count Forward or Backward by a Given Number ______ ____________

1g Round Numbers.......................______ ____________
12a Add and Subtract Whole Numbers - No Carrying ______ ____________

12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ____________

12h Estimate a Sum or Difference.......______ ____________

JSEP Lessons 1h,1g,12a,12b,and 12h will replace textbook sections 1-1 and 1-2.

1-1 Addition of Whole Numbers, pp. 6-14 **(optional)**
Book: Exercise 1-1
A. 1,6,11,16,21
B. 2,7,14
C. 1,3,5,7..................______ ____________

1-2 Subtraction of Whole Numbers, pp. 14-22 **(optional)**
Book: Exercise 1-2
A. 1,5,13,19,25,31
B. 1,7,13,19,25
C. 3,4,7,8..................______ ____________

JSEP Lessons:
12c Add and Subtract Decimals..........______ ____________
13a Multiply and Divide Whole Numbers..______ ____________
13b Multiply and Divide Decimal Numbers______ ____________
13c Divide Numbers with Decimals.......______ ____________
16b Compute Averages...................______ ____________

JSEP Lessons 12c, 13a, 13b, 13c, and 16b will replace textbook sections 1-3 and 1-4.

1-3 Multiplication of Whole Numbers, pp. 22-30 **(optional)**
Book: Exercise 1-3
A. 1,7,13,19,25,31
B. 1,6,20
C. 2,6,7............................______ ____________

1-4 Division of Whole Numbers, pp. 31-39 (optional)
Book: Exercise 1-4
A. 1,7,13,16,25
B. 1,7,10,14,26
C. 1,8.......................______ ____________

Skills Bank II (optional)
Word Problems:
Lesson 8 Needed Operations.............______ ____________

1-5 Order of Operations, pp. 39-42
Exercises 1-5
A. All evens
B. 3........................______.....____________

Unit 1 Turn in exercises and ask for Test 1.
Unit 1 Exercises.........______ ____________

Math 050

Assignment Completion Record

Unit 2 (CHT) Fractions

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: cht0502 ***

Computer: Skills Bank II

Grade Date Completed

JSEP Lessons:
13a Multiply and Divide Whole Numbers.. ______ ____________
14b Reduce Fractions to Lowest Terms... ______ ____________
14g Estimate Parts Using Common Fractions
______ ____________

2-1 Working with Fractions, pp. 53-63
Book: Exercise 2-1
A. All evens
B. All odds
C. All evens
D. all odds
E. All evens
F. 2,4,6,8.................. ______ ____________

JSEP Lesson:
14f Multiply and Divide Fractions...... ______ ____________

2-2 Multiplication of Fractions, pp. 63-68
Book: Exercise 2-2
A. 4,8,12,16,22,25
B. 4,8,12,16
C. 6,8,10,11,14,15,26,27..... ______ ____________

2-3 Division of Fractions, pp. 68-73
Book: Exercise 2-3
A. 4,8,12,16,24
B. 1,2,6,9,10................ ______..... ____________

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying
______ ____________

12b Add and Subtract Whole Numbers - Carrying and Borrowing
______ ____________

14e Add and Subtract Fractions......... ______ ____________

2-4 Addition and Subtraction of Fractions, pp. 73-83
Exercise 2-4
A. 3,6,9,15,18,21,24,27,

B. 1,3,7,8,9,10,11,12
C. 1,3,5,6,9,10,13,19,21.....______ ____________

Unit 2 Turn in exercises and ask for Test 2.
Unit 2 Exercises.........______ ____________

Math 050

Assignment Completion Record

Unit 3 (CHT) Decimal Numbers

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zcht0503 ***

Grade   Date Completed

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying
______ ____________

12b Add and Subtract Whole Numbers - Carrying and Borrowing
______ ____________

12c Add and Subtract Decimals.........______ ____________

JSEP Lessons 12a, 12b, and 12c will replace textbook section 3-1.

3-1 Addition and Subtraction of Decimals, pp. 91-100 **(optional)**
Book: Exercise 3-1
A. 5,10,15,20,21,30,33,36
B. 1,2,3,7..................______ ____________

JSEP Lessons:
13a Multiply and Divide Whole Numbers..______ ____________
13b Multiply and Divide Decimal Numbers______ ____________

JSEP Lessons 13a and 13b will replace textbook section 3-2

3-2 Multiplication and Division of Decimal Numbers, pp. 100-112
(optional)
Book: Exercise 3-2
A. 5,10,15,20,25,30,35
B. All evens
C. 3,5,6,8,9,12.............______ ____________

JSEP Lesson:
14c Use a Conversion Table to Convert Decimals and Fractions
______ ____________

3-3 Decimal Fractions, pp. 113-121
Book: Exercise 3-3
A. 1,5,9,13,17,21
B. 1,2,5,8
C. 4,7,8....................______ ____________

Unit 3 **Turn in exercises and ask for Test 3.**
Unit 3 Exercises........______ ____________

Math 050

Assignment Completion Record

Unit 4 (CHT) Percent

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
***** Course: zcht0504 *****

Computer: Skills Bank II

Grade Date Completed

JSEP Lessons:
13a Multiply and Divide Whole Numbers.. ______ __________
12a Adding and Subtracting Whole Numbers - No Carrying
______ __________

12b Add and Subtract Whole Numbers - Carrying and Borrowing
______ __________

12c Add and Subtract Decimals.......... ______ __________
13b Multiply and Divide Decimal Numbers ______ __________
14d Convert Decimals, Percents, and Fractions
______ __________

4-1 Introduction to Percent, pp. 133-140
Book: Exercise 4-1
A. 1,5,9,13,17,19
B. 1,5,6,7,9,12,13.......... ______ ..... __________

Computer: Skills Bank II (optional)
Word Problems:
Lesson 12 Finding a Percent Using Proportions
______ __________

4-2 Percent Problems, pp. 140-152
Book: Exercise 4-2
A.,B. All evens
C. 1,3,5,6,8................. ______ __________

Computer: Skills Bank II (optional)
Word Problems:
Lesson 17 Percent of Change............ ______ __________

4-3 Applications of Percent Calculations, pp. 152-166
Exercise 4-3
1,2,3,4,5,6,9,10,11,12,13,15,17,19
______ __________

Unit 4 Turn in exercises and ask for Test 4.
Unit 4 Exercises ______ __________

Math 050

Assignment Completion Record

Unit 5 (CHT) Measurement

Textbook: Mathematics for the Trades, 3rd ed.

Handout taken from: A Basic Math Approach to Concepts of Chemistry, 4th ed.

Computer: JSEP
*** Course: zcht0505 ***

Grade Date Completed

JSEP Lessons:
2b Identify Units of Measure and Classify by Type of Measure
_____ __________

1c Order Numbers in Specific Sequence.. _____ __________
2a Interpret the Markings on Linear Scales
_____ __________

5a Read and Interpret Gauges........... _____ __________
12g Add and Subtract Measurements...... _____ __________

5-1 Working with Measurement Numbers, pp. 173-187
Book: Exercise 5-1
A.,B. All evens
C. 1,3
D. 1,4,7.................... _____ __________

JSEP Lessons:
5b Using Gauges with Digital Readouts.. _____ __________
5d Read and Interpret Scales with Positive and Negative Markings
_____ __________

5-2 Units and Unit Conversion, pp. 187-197
Book: Exercise 5-2
A.,B. All odds
C. 1,4,7,10,13................ _____ __________

JSEP Lessons:
2d Identify Measures of Weight, Pressure, and Torque
_____ __________

5e Read and Interpret Multi-Scale Gauges
_____ __________

5-3 Metric Units, pp. 197-213
Book: Exercise 5-3
A.,B.,C. All evens
D. 1,4,7,10,12................ ______________

JSEP Lesson:
2c Measure Lengths and Distances using Rules and Sticks

Math 050

Assignment Completion Record

Unit 1 (IMM) Arithmetic of Whole Numbers

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zimm0501 ***

Computer: Skills Bank II

Grade Date Completed

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying _____ __________

12b Add and Subtract Whole Numbers - Carrying and Borrowing _____ __________

JSEP Lessons 12a and 12b will replace textbook sections 1-1 and 1-2.

1-1 Addition of Whole Numbers, pp. 6-14 **(optional)**
Book: Exercise 1-1
A. 1,6,11,16,21
B. 2,7,14
C. 1,3,5,7.................... _____ __________

1-2 Subtraction of Whole Numbers, pp. 14-22 **(optional)**
Book: Exercise 1-2
A. 1,5,13,19,25,31
B. 1,7,13,19,25
C. 3,4,7,8.................... _____ __________

Skills Bank II (optional)
Math Computation:
Lesson 3 Multiplication of Whole Numbers _____ __________

1-3 Multiplication of Whole Numbers, pp. 22-30
Book: Exercise 1-3
A. 1,7,13,19,25,31
B. 1,6,20
C. 2,6,7......................... _____ __________

Skills Bank II (optional)
Math Computation:
Lesson 4 Division of Whole Numbers..... _____ __________

1-4 Division of Whole Numbers, pp. 31-39
Book: Exercise 1-4
A. 1,7,13,16,25

B. 1,7,10,14,26
C. 1,8........................_____ __________

Skills Bank II (optional)
Word Problems:
Lesson 8 Needed Operations.............._____ __________

1-5 Order of Operations, pp. 39-42
Exercises 1-5
A. All evens
B. 3........................_____....._________

Unit 1 Turn in exercises and ask for Test 1.
Unit 1 Exercises........._____ __________

Math 050

Assignment Completion Record

Unit 2 (IMM) Fractions

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: imm0502 ***

Grade Date Completed

JSEP Lessons:
13a Multiply and Divide Whole Numbers.. _____ __________
14b Reduce Fractions to Lowest Terms... _____ __________
14g Estimate Parts Using Common Fractions
_____ __________

2-1 Working with Fractions, pp. 53-63
Book: Exercise 2-1
A. All evens
B. All odds
C. All evens
D. all odds
E. All evens
F. 2,4,6,8.................. _____ __________

JSEP Lesson:
14f Multiply and Divide Fractions....... _____ __________

2-2 Multiplication of Fractions, pp. 63-68
Book: Exercise 2-2
A. 4,8,12,16,22,25
B. 4,8,12,16
C. 6,8,10,11,14,15,26,27..... _____ __________

2-3 Division of Fractions, pp. 68-73
Book: Exercise 2-3
A. 4,8,12,16,24
B. 1,2,6,9,10................ _____..... __________

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying
_____ __________

12b Add and Subtract Whole Numbers - Carrying and Borrowing
_____ __________

14e Add and Subtract Fractions......... _____ __________

2-4 Addition and Subtraction of Fractions, pp. 73-83
Exercise 2-4
A. 3,6,9,15,18,21,24,27,
B. 1,3,7,8,9,10,11,12
C. 1,3,5,6,9,10,13,19,21..... _____ __________

Unit 2 Turn in exercises and ask for Test 2.
Unit 2 Exercises........._____ __________

Math 050

Assignment Completion Record

Unit 3 (IMM) Decimal Numbers

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zimm0503 ***

Grade Date Completed

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying ______ ______
12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ______
12c Add and Subtract Decimals.......... ______ ______

JSEP Lessons 12a, 12b, and 12c will replace textbook section 3-1.

3-1 Addition and Subtraction of Decimals, pp. 91-100 (optional)
Book: Exercise 3-1
A. 5,10,15,20,21,30,33,36
B. 1,2,3,7.................. ______ ______

JSEP Lessons:
13a Multiply and Divide Whole Numbers.. ______ ______
13b Multiply and Divide Decimal Numbers ______ ______
13c Divide Numbers with Decimals....... ______ ______
16b Compute Averages.................. ______ ______

JSEP Lessons 13a, 13b, 13c, and 16b will replace textbook section 3-2.

3-2 Multiplication and Division of Decimal Numbers, pp. 100-112 (optional)
Book: Exercise 3-2
A. 5,10,15,20,25,30,35
B. All evens
C. 3,5,6,8,9,12.............. ______ ______

JSEP Lesson:
14c Use a Conversion Table to Convert Decimals and Fractions ______ ______

3-3 Decimal Fractions, pp. 113-121
Book: Exercise 3-3
A. 1,5,9,13,17,21
B. 1,2,5,8
C. 4,7,8..................... ______ ______

Unit 3 Turn in exercises and ask for Test 3.
Unit 3 Exercises......... ______ ______

Math 050

Assignment Completion Record

Unit 4 (IMM) Percent

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zimm0504 ***

Computer: Skills Bank II

Grade Date Completed

JSEP Lessons:
13a Multiply and Divide Whole Numbers..______ ____________
12a Adding and Subtracting Whole Numbers - No Carrying
______ ____________

12b Add and Subtract Whole Numbers - Carrying and Borrowing
______ ____________

12c Add and Subtract Decimals..........______ ____________
13b Multiply and Divide Decimal Numbers______ ____________
14d Convert Decimals, Percents, and Fractions
______ ____________

4-1 Introduction to Percent, pp. 133-140
Book: Exercise 4-1
A. 1,5,9,13,17,19
B. 1,5,6;7,9,12,13............______.....____________

Computer: Skills Bank II (optional)
Word Problems:
Lesson 12 Finding a Percent Using Proportions
______ ____________

4-2 Percent Problems, pp. 140-152
Book: Exercise 4-2
A.,B. All evens
C. 1,3,5,6,8.................______ ____________

Computer: Skills Bank II (optional)
Word Problems:
Lesson 17 Percent of Change............______ ____________

4-3 Applications of Percent Calculations, pp. 152-166
Exercise 4-3
1,2,3,4,5,6,9,10,11,12,13,15,17,19
______ ____________

Unit 4 Turn in exercises and ask for Test 4.
Unit 4 Exercises ______ ____________

Math 050

Assignment Completion Record

Unit 5 (IMM) Measurement

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zimm0505 ***

	Grade	Date Completed
JSEP Lessons:		
2g Estimate Lengths and Distances......		
5b Using Gauges with Digital Readouts..		
5g Read and Interpret Unnumbered Gauges		
5-1 Working with Measurement Numbers, pp. 173-187 Book: Exercise 5-1 A.,B. All evens C.,D. All problems...........		
JSEP Lessons:		
5c Read a Color Band Gauge.............		
1c Order Numbers in Specific Sequence..		
2a Interpret the Markings on Linear Scales		
5d Read and Interpret Scales with Positive and Negative Markings		
5h Read a Moving Gauge.................		
5-2 Units and Unit Conversion, pp. 187-197 Book: Exercise 5-2 A.,B. All odds C. 3,8,9.......................		
JSEP Lessons:		
5e Read and Interpret Multi-Scale Gauges		
5a Read and Interpret Gauges...........		
5f Match a Gauge Reading to a Specification		
5i Adjust Gauges to Meet Specifications		
5-3 Metric Units, pp. 197-213 Book: Exercise 5-3 A.,B.,C. All evens D. 1,4,5,11...................		
JSEP Lessons:		
2f Measure with a Non-Numerical Calibrated Scale		

5-4 Direct Measurements, pp. 213-233
Book: Exercise 5-4
B. 1-6 all.................... ______ ____________

Unit 5 Turn in exercises and ask for Test 5.
Unit 5 Exercises ______ ____________

Math 050

Assignment Completion Record

Unit 1 (INT) Arithmetic of Whole Numbers

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zint0501 ***

Computer: Skills Bank II

Grade Date Completed

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying ______ ____________
12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ____________

JSEP Lessons 12a and 12b will replace textbook sections 1-1 and 1-2.

1-1 Addition of Whole Numbers, pp. 6-14 (optional)
Book: Exercise 1-1
A. 1,6,11,16,21
B. 2,7,14
C. 1,3,5,7..................... ______ ____________

1-2 Subtraction of Whole Numbers, pp. 14-22 (optional)
Book: Exercise 1-2
A. 1,5,13,19,25,31
B. 1,7,13,19,25
C. 3,4,7,8..................... ______ ____________

JSEP Lesson:
13a Multiply and Divide Whole Numbers.. ______ ____________

1-3 Multiplication of Whole Numbers, pp. 22-30
Book: Exercise 1-3
A. 1,7,13,19,25,31
B. 1,6,20
C. 2,6,7......................... ______ ____________

1-4 Division of Whole Numbers, pp. 31-39
Book: Exercise 1-4
A. 1,7,13,16,25
B. 1,7,10,14,26
C. 1,8........................... ______ ____________

Skills Bank II (optional)
Word Problems:
Lesson 8 Needed Operations.............. ______ ____________

1-5 Order of Operations, pp. 39-42
Exercises 1-5
A. All evens
B. 3........................______.....__________

Unit 1 Turn in exercises and ask for Test 1.
Unit 1 Exercises.........______ __________

Math 050

Assignment Completion Record

Unit 2 (INT) Fractions

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: int0502 ***

Grade Date Completed

JSEP Lessons:
13a Multiply and Divide Whole Numbers..______ ______
14b Reduce Fractions to Lowest Terms...______ ______
14g Estimate Parts Using Common Fractions
______ ______

2-1 Working with Fractions, pp. 53-63
Book: Exercise 2-1
A. All evens
B. All odds
C. All evens
D. all odds
E. All evens
F. 2,4,6,8..................______ ______

JSEP Lesson:
14f Multiply and Divide Fractions......______ ______

2-2 Multiplication of Fractions, pp. 63-68
Book: Exercise 2-2
A. 4,8,12,16,22,25
B. 4,8,12,16
C. 6,8,10,11,14,15,26,27.....______ ______

2-3 Division of Fractions, pp. 68-73
Book: Exercise 2-3
A. 4,8,12,16,24
B. 1,2,6,9,10................______.....______

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying
______ ______

12b Add and Subtract Whole Numbers - Carrying and Borrowing
______ ______

14e Add and Subtract Fractions.........______ ______

2-4 Addition and Subtraction of Fractions, pp. 73-83
Exercise 2-4
A. 3,6,9,15,18,21,24,27,
B. 1,3,7,8,9,10,11,12
C. 1,3,5,6,9,10,13,19,21.....______ ______

Unit 2 Turn in exercises and ask for Test 2.
Unit 2 Exercises........._____ __________

Math 050

Assignment Completion Record

Unit 3 (INT) Decimal Numbers

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zint0503 ***

Grade Date Completed

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying ______ ____________

12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ____________

12c Add and Subtract Decimals..........______ ____________

JSEP Lessons 12a, 12b, and 12c will replace textbook section 3-1.

3-1 Addition and Subtraction of Decimals, pp. 91-100 (optional)
Book: Exercise 3-1
A. 5,10,15,20,21,30,33,36
B. 1,2,3,7..................______ ____________

JSEP Lessons:
13a Multiply and Divide Whole Numbers..______ ____________
13b Multiply and Divide Decimal Numbers______ ____________
13c Divide Numbers with Decimals.......______ ____________
16b Compute Averages..................______ ____________

JSEP Lessons 13a, 13b, 13c, and 16b will replace textbook section 3-2.

3-2 Multiplication and Division of Decimal Numbers, pp. 100-112 (optional)
Book: Exercise 3-2
A. 5,10,15,20,25,30,35
B. All evens
C. 3,5,6,8,9,12..............______ ____________

JSEP Lesson:
14c Use a Conversion Table to Convert Decimals and Fractions ______ ____________

3-3 Decimal Fractions, pp. 113-121
Book: Exercise 3-3
A. 1,5,9,13,17,21
B. 1,2,5,8
C. 4,7,8.....................______ ____________

Unit 3 Turn in exercises and ask for Test 3.
Unit 3 Exercises.........______ ____________

Math 050

Assignment Completion Record

Unit 4 (INT) Percent

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
***   Course: zint0504   ***

Computer: Skills Bank II

Grade   Date Completed

JSEP Lessons:
13a Multiply and Divide Whole Numbers.. _____   __________
12a Adding and Subtracting Whole Numbers - No Carrying
_____   __________

12b Add and Subtract Whole Numbers - Carrying and Borrowing
_____   __________

12c Add and Subtract Decimals.......... _____   __________
13b Multiply and Divide Decimal Numbers _____   __________
14d Convert Decimals, Percents, and Fractions
_____   __________

4-1 Introduction to Percent, pp. 133-140
Book: Exercise 4-1
A. 1,5,9,13,17,19
B. 1,5,6,7,9,12,13.......... _____ ..... __________

Computer: Skills Bank II (optional)
Word Problems:
Lesson 12 Finding a Percent Using Proportions
_____   __________

4-2 Percent Problems, pp. 140-152
Book: Exercise 4-2
A.,B. All evens
C. 1,3,5,6,8................. _____   __________

Computer: Skills Bank II (optional)
Word Problems:
Lesson 17 Percent of Change............ _____   __________

4-3 Applications of Percent Calculations, pp. 152-166
Exercise 4-3
1,2,3,4,5,6,9,10,11,12,13,15,17,19
_____   __________

Unit 4 Turn in exercises and ask for Test 4.
Unit 4 Exercises _____   __________

Math 050

Assignment Completion Record

Unit 4 (INT) Percent

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zint0504 ***

Computer: Skills Bank II

Grade Date Completed

JSEP Lessons:
13a Multiply and Divide Whole Numbers.. ______ ____________
12a Adding and Subtracting Whole Numbers - No Carrying
______ ____________
12b Add and Subtract Whole Numbers - Carrying and Borrowing
______ ____________
12c Add and Subtract Decimals.......... ______ ____________
13b Multiply and Divide Decimal Numbers ______ ____________
14d Convert Decimals, Percents, and Fractions
______ ____________

4-1 Introduction to Percent, pp. 133-140
Book: Exercise 4-1
A. 1,5,9,13,17,19
B. 1,5,6,7,9,12,13............ ______ ..... ____________

Computer: Skills Bank II (optional)
Word Problems:
Lesson 12 Finding a Percent Using Proportions
______ ____________

4-2 Percent Problems, pp. 140-152
Book: Exercise 4-2
A., B. All evens
C. 1,3,5,6,8................ ______ ____________

Computer: Skills Bank II (optional)
Word Problems:
Lesson 17 Percent of Change........... ______ ____________

4-3 Applications of Percent Calculations, pp. 152-166
Exercise 4-3
1,2,3,4,5,6,9,10,11,12,13,15,17,19
______ ____________

Unit 4 Turn in exercises and ask for Test 4.
Unit 4 Exercises ______ ____________

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Math 050

Assignment Completion Record

Unit 5 (INT) Measurement

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zint0505 ***

Grade Date Completed

JSEP Lessons:
5a Read and Interpret Gauges.......... ______ ______
5b Using Gauges with Digital Readouts.. ______ ______
5c Read a Color Band Gauge............ ______ ______
5d Read and Interpret Scales with Positive and Negative Markings ______ ______

5-3 Metric Units, pp. 197-213
Book: Exercise 5-3
A.,B.,C. All evens
D. 1,4,7,10,12.............. ______ ______

JSEP Lessons:
5g Read and Interpret Unnumbered Gauges ______ ______
5h Read a Moving Gauge................. ______ ______
5f Match a Gauge Reading to a Specification ______ ______
5i Adjust Gauges to Meet Specifications ______ ______

Handout on Resistors
Exercises: Worksheet, 1-24 all..... ______ ______

Test 5 Turn in exercises and ask for Test 5.
Unit 5 Exercises ______ ______

Math 050

Assignment Completion Record

Unit 1 (MET) Arithmetic of Whole Numbers

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zmet0501 ***

Computer: Skills Bank II

Grade Date Completed

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying ______ ____________

12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ____________

JSEP Lessons 12a and 12b will replace textbook sections 1-1 and 1-2.

1-1 Addition of Whole Numbers, pp. 6-14 (optional)
Book: Exercise 1-1
A. 1,6,11,16,21
B. 2,7,14
C. 1,3,5,7.................. ______ ____________

1-2 Subtraction of Whole Numbers, pp. 14-22 (optional)
Book: Exercise 1-2
A. 1,5,13,19,25,31
B. 1,7,13,19,25
C. 3,4,7,8.................. ______ ____________

JSEP Lesson:
13a Multiply and Divide Whole Numbers.. ______ ____________

1-3 Multiplication of Whole Numbers, pp. 22-30
Book: Exercise 1-3
A. 1,7,13,19,25,31
B. 1,6,20
C. 2,6,7.......................... ______ ____________

1-4 Division of Whole Numbers, pp. 31-39
Book: Exercise 1-4
A. 1,7,13,16,25
B. 1,7,10,14,26
C. 1,8.......................... ______ ____________

Skills Bank II (optional)
Word Problems:
Lesson 8 Needed Operations............. ______ ____________

1-5 Order of Operations, pp. 39-42
Exercises 1-5
A. All evens
B. 3........................______.....____________

Unit 1 Turn in exercises and ask for Test 1.
Unit 1 Exercises.........______ ____________

Math 050

Assignment Completion Record

Unit 2 (MET) Fractions

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: met0502 ***

Grade Date Completed

JSEP Lessons:
13a Multiply and Divide Whole Numbers.. ______ ______
14b Reduce Fractions to Lowest Terms... ______ ______
14g Estimate Parts Using Common Fractions
______ ______

2-1 Working with Fractions, pp. 53-63
Book: Exercise 2-1
A. All evens
B. All odds
C. All evens
D. all odds
E. All evens
F. 2,4,6,8.................. ______ ______

JSEP Lesson:
14f Multiply and Divide Fractions....... ______ ______

2-2 Multiplication of Fractions, pp. 63-68
Book: Exercise 2-2
A. 4,8,12,16,22,25
B. 4,8,12,16
C. 6,8,10,11,14,15,26,27..... ______ ______

2-3 Division of Fractions, pp. 68-73
Book: Exercise 2-3
A. 4,8,12,16,24
B. 1,2,6,9,10................ ______..... ______

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying
______ ______

12b Add and Subtract Whole Numbers - Carrying and Borrowing
______ ______

14e Add and Subtract Fractions......... ______ ______

2-4 Addition and Subtraction of Fractions, pp. 73-83
Exercise 2-4
A. 3,6,9,15,18,21,24,27,
B. 1,3,7,8,9,10,11,12
C. 1,3,5,6,9,10,13,19,21..... ______ ______

Unit 2 Turn in exercises and ask for Test 2.

Unit 2 Exercises.........______ ____________

Math 050

Assignment Completion Record

Unit 3 (MET) Decimal Numbers

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zmet0503 ***

Grade Date Completed

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying ______ ____________

12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ____________

12c Add and Subtract Decimals..........______ ____________

JSEP Lessons 12a, 12b, and 12c will replace textbook section 3-1.

3-1 Addition and Subtraction of Decimals, pp. 91-100 **(optional)**
Book: Exercise 3-1
A. 5,10,15,20,21,30,33,36
B. 1,2,3,7...................______ ____________

JSEP Lessons:
13a Multiply and Divide Whole Numbers..______ ____________
13b Multiply and Divide Decimal Numbers______ ____________
13c Divide Numbers with Decimals.......______ ____________
16b Compute Averages...................______ ____________

JSEP Lessons 13a, 13b, 13c, and 16b will replace textbook section 3-2.

3-2 Multiplication and Division of Decimal Numbers, pp. 100-112 **(optional)**
Book: Exercise 3-2
A. 5,10,15,20,25,30,35
B. All evens
C. 3,5,6,8,9,12..............______ ____________

JSEP Lesson:
14c Use a Conversion Table to Convert Decimals and Fractions ______ ____________

3-3 Decimal Fractions, pp. 113-121
Book: Exercise 3-3
A. 1,5,9,13,17,21
B. 1,2,5,8
C. 4,7,8.....................______ ____________

Unit 3 Turn in exercises and ask for Test 3.
Unit 3 Exercises........______ ____________

Math 050

Assignment Completion Record

Unit 4 (MET) Percent

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zmet0504 ***

Computer: Skills Bank II

Grade Date Completed

JSEP Lessons:
13a Multiply and Divide Whole Numbers.. ______ ______
12a Adding and Subtracting Whole Numbers - No Carrying ______ ______
12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ______
12c Add and Subtract Decimals.......... ______ ______
13b Multiply and Divide Decimal Numbers ______ ______
14d Convert Decimals, Percents, and Fractions ______ ______

4-1 Introduction to Percent, pp. 133-140
Book: Exercise 4-1
A. 1,5,9,13,17,19
B. 1,5,6,7,9,12,13.......... ______ ..... ______

Computer: Skills Bank II (optional)
Word Problems:
Lesson 12 Finding a Percent Using Proportions ______ ______

4-2 Percent Problems, pp. 140-152
Book: Exercise 4-2
A.,B. All evens
C. 1,3,5,6,8................ ______ ______

Computer: Skills Bank II (optional)
Word Problems:
Lesson 17 Percent of Change............ ______ ______

4-3 Applications of Percent Calculations, pp. 152-166
Exercise 4-3
1,2,3,4,5,6,9,10,11,12,13,15,17,19 ______ ______

Unit 4 Turn in exercises and ask for Test 4.
Unit 4 Exercises ______ ______

Math 050

Assignment Completion Record

Unit 5 (MET) Measurement

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zmet0505 ***

Grade Date Completed

JSEP Lessons:
5a Read and Interpret Gauges.......... ______ ____________
5b Using Gauges with Digital Readouts.. ______ ____________

5-1 Working with Measurement Numbers, pp. 173-187
Book: Exercise 5-1
A.,B. All evens
C.,D. All problems.......... ______ ____________

JSEP Lessons:
5c Read a Color Band Gauge............. ______ ____________
5d Read and Interpret Scales with Positive and Negative Markings ______ ____________

5g Read and Interpret Unnumbered Gauges ______ ____________

5-2 Units and Unit Conversion, pp. 187-197
Book: Exercise 5-2
A.,B. All odds
C. 3,8,9.................... ______ ____________

JSEP Lessons:
5h Read a Moving Gauge................. ______ ____________
5f Match a Gauge Reading to a Specification ______ ____________

5i Adjust Gauges to Meet Specifications ______ ____________

5-3 Metric Units, pp. 197-213
Book: Exercise 5-3
A.,B.,C. All evens
D. 1,4,5,11.................. ______ ____________

JSEP Lessons:
1c Order Numbers in Specific Sequence.. ______ ____________
2a Interpret the Markings on Linear Scales ______ ____________

5e Read and Interpret Multi-Scale Gauges ______ ____________

5-4 Direct Measurements, pp. 213-233
Book: Exercise 5-4
A. 1,3

B. 2-18 even
C. 2-10 even
D. 2-8 even

Unit 5 Turn in exercises and ask for Test 5.
Unit 5 Exercises ______ ____________

Math 050

Assignment Completion Record

Unit 1 (OSH)   Arithmetic of Whole Numbers

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zosh0501   ***

Computer: Skills Bank II

Grade   Date Completed

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying ______ ______

12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ______

JSEP Lessons 12a and 12b will replace textbook sections 1-1 and 1-2.

1-1 Addition of Whole Numbers, pp. 6-14 **(optional)**
Book: Exercise 1-1
A. 1,6,11,16,21
B. 2,7,14
C. 1,3,5,7.................______ ______

1-2 Subtraction of Whole Numbers, pp. 14-22 **(optional)**
Book: Exercise 1-2
A. 1,5,13,19,25,31
B. 1,7,13,19,25
C. 3,4,7,8.................______ ______

JSEP Lesson:
13a Multiply and Divide Whole Numbers..______ ______

1-3 Multiplication of Whole Numbers, pp. 22-30
Book: Exercise 1-3
A. 1,7,13,19,25,31
B. 1,6,20
C. 2,6,7.......................______ ______

1-4 Division of Whole Numbers, pp. 31-39
Book: Exercise 1-4
A. 1,7,13,16,25
B. 1,7,10,14,26
C. 1,8.......................______ ______

Skills Bank II (optional)
Word Problems:
Lesson 8 Needed Operations.............______ ______

1-5 Order of Operations, pp. 39-42
Exercises 1-5
A. All evens
B. 3........................______.....__________

Unit 1 Turn in exercises and ask for Test 1.
Unit 1 Exercises.........______ __________

Math 050

Assignment Completion Record

Unit 2 (OSH) Fractions

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: osh0502 ***

Grade Date Completed

JSEP Lessons:
13a Multiply and Divide Whole Numbers.. ______ ____________
14b Reduce Fractions to Lowest Terms... ______ ____________
14g Estimate Parts Using Common Fractions
______ ____________

2-1 Working with Fractions, pp. 53-63
Book: Exercise 2-1
A. All evens
B. All odds
C. All evens
D. all odds
E. All evens
F. 2,4,6,8.................. ______ ____________

JSEP Lesson:
14f Multiply and Divide Fractions...... ______ ____________

2-2 Multiplication of Fractions, pp. 63-68
Book: Exercise 2-2
A. 4,8,12,16,22,25
B. 4,8,12,16
C. 6,8,10,11,14,15,26,27..... ______ ____________

2-3 Division of Fractions, pp. 68-73
Book: Exercise 2-3
A. 4,8,12,16,24
B. 1,2,6,9,10................ ______..... ____________

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying
______ ____________

12b Add and Subtract Whole Numbers - Carrying and Borrowing
______ ____________

14e Add and Subtract Fractions......... ______ ____________

2-4 Addition and Subtraction of Fractions, pp. 73-83
Exercise 2-4
A. 3,6,9,15,18,21,24,27,
B. 1,3,7,8,9,10,11,12
C. 1,3,5,6,9,10,13,19,21..... ______ ____________

Unit 2 Turn in exercises and ask for Test 2.

Unit 2 Exercises........______ ____________

Math 050

Assignment Completion Record

Unit 3 (OSH) Decimal Numbers

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zosh0503 ***

Computer: Skills Bank II

Grade Date Completed

Computer: Skills Bank II (optional)
Math Computation:
Lesson 5 Addition of Decimals.......... ______ ______
Lesson 6 Subtraction of Decimals........ ______ ______

3-1 Addition and Subtraction of Decimals, pp. 91-100
Book: Exercise 3-1
A. 5,10,15,20,21,30,33,36
B. 1,2,3,7.................... ______ ______

Computer: Skills Bank II (optional)
Math Computation:
Lesson 7 Multiplication of Decimals.... ______ ______
Lesson 8 Division of Decimals.......... ______ ______

3-2 Multiplication and Division of Decimal Numbers, pp. 100-112
Book: Exercise 3-2
A. 5,10,15,20,25,30,35
B. All evens
C. 3,5,6,8,9,12............... ______ ______

JSEP Lesson:
14c Use a Conversion Table to Convert Decimals and Fractions
______ ______

3-3 Decimal Fractions, pp. 113-121
Book: Exercise 3-3
A. 1,5,9,13,17,21
B. 1,2,5,8
C. 4,7,8...................... ______ ______

Unit 3 Turn in exercises and ask for Test 3.
Unit 3 Exercises......... ______ ______

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Math 050

Assignment Completion Record

Unit 4 (OSH) Percent

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zosh0504 ***

Computer: Skills Bank II

Grade   Date Completed

JSEP Lessons:
13a Multiply and Divide Whole Numbers.. ______ ____________
12a Adding and Subtracting Whole Numbers - No Carrying ______ ____________
12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ____________
12c Add and Subtract Decimals.......... ______ ____________
13b Multiply and Divide Decimal Numbers ______ ____________
14d Convert Decimals, Percents, and Fractions ______ ____________

4-1 Introduction to Percent, pp. 133-140
Book: Exercise 4-1
A. 1,5,9,13,17,19
B. 1,5,6,7,9,12,13............ ______ ..... ____________

Computer: Skills Bank II (optional)
Word Problems:
Lesson 12 Finding a Percent Using Proportions ______ ____________

4-2 Percent Problems, pp. 140-152
Book: Exercise 4-2
A.,B. All evens
C. 1,3,5,6,8................ ______ ____________

Computer: Skills Bank II (optional)
Word Problems:
Lesson 17 Percent of Change........... ______ ____________

4-3 Applications of Percent Calculations, pp. 152-166
Exercise 4-3
1,2,3,4,5,6,9,10,11,12,13,15,17,19 ______ ____________

Unit 4 Turn in exercises and ask for Test 4.
Unit 4 Exercises ______ ____________

Math 050

Assignment Completion Record

Unit 5 (OSH) Descriptive Statistics

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zosh0505 ***

Grade Date Completed

JSEP Lessons:
2e Identify Measures of Volume and Capacity
______ ______

5c Read a Color Band Gauge..............______ ______
5h Read a Moving Gauge..................______ ______
1c Order Numbers in Specific Sequence..______ ______

5.1 Averages, Medians, and Modes, pp. 225-230
Exercise Set 5.1, pp. 229-230
1-21 odd..........................______ ______

JSEP Lessons:
2a Interpret the Markings on Linear Scales
______ ______

5d Read and Interpret Scales with Positive and Negative Markings
______ ______

5e Read and Interpret Multi-Scale Gauges
______ ______

5.2 Tables, Charts, and Pictographs, pp. 231-240
Exercise Set 5.2, pp. 237-240
1-39 odd..........................______ ______

JSEP Lessons:
12g Add and Subtract Measurements......______ ______
16f Solve Conversion Problems..........______ ______
5a Read and Interpret Gauges...........______ ______

5.3 Bar Graphs and Line Graphs, pp. 241-250
Exercise Set 5.3, pp. 247-250
1-31 odd..........................______ ______

JSEP Lessons:
5b Using Gauges with Digital Readouts..______ ______
5g Read and Interpret Unnumbered Gauges______ ______
5f Match a Gauge Reading to a Specification
______ ______

5.4 Circle Graphs, pp. 251-256
Exercise Set 5.4, pp. 255-256
1-13 odd..........................______ ______

Unit 5 Turn in Exercises and ask for Unit 5 Test (OSH).
Unit 5 Exercises........______ ____________

IV. MATERIALS INVENTORY SHEET

The following materials are required for Math 050:

Textbook:
Mathematics for the Trades, 3rd ed., Carman and Saunders, Prentice-Hall Publishing Company.

Additional Materials:

No. 2 pencils

Loose-leaf notebook paper

An electronic calculator

V. GRADING/ATTENDANCE POLICY

Course grades are based on quizzes, tests, and attendance. A unit or objective is not considered to be complete unless the student has a grade of 70 or higher on the quiz or test covering the unit or objective.

Class is scheduled for five hours per week. If a student misses 10 or more hours of class, an excessive absence report will be filed on them with student services. If a student is absent for 5 hours or less during the quarter, they will receive an additional 5-point bonus on their course grade.

SCANS

The Three-Part Foundation competencies of SCANS is in the process of being fully integrated in Pre-Technical Mathematics.

These competencies are listed below.

Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens and speaks

A. Reading - locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules

B. Writing - not applicable to Pre-Technical Mathematics

C. Arithmetic/Mathematics - performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques

D. Listening - receives, attends to, interprets, and responds to verbal messages and other cues

E. Speaking - not applicable to Pre-Technical Mathematics

Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons

A. Creative Thinking - generates new ideas

B. Decision Making - specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative

C. Problem Solving - recognizes problems and devises and implements plan of action

D. Seeing Things in the Mind's Eye - organizes, and processes symbols, pictures, graphs, objects, and other information

E. Knowing How-to-Learn - uses efficient learning techniques to acquire and apply new knowledge and skills

F. Reasoning - discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem

Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty

A. Responsibility - exerts a high level of effort and perseveres toward goal attainment

B. Self-Esteem - believes in own self-worth and maintains a positive view of self

C. Sociability - demonstrates understanding, friendliness, adaptability, empathy, and politeness in group settings

D. Self-Management - assesses self accurately, sets personal goals, monitors progress, and exhibits self-control

E. Integrity/Honesty - chooses ethical courses of action

Texas State Technical College
Waco/Marshall

COURSE SYLLABUS

Beginning Algebra I
Title

MATH 060
Number

Placement test or MATH 050
Prerequisite

Greg McDaniel
Prepared by

Approved by

6-9-94
Date

This Syllabus has been reviewed and is current on date indicated.

Reviewed by	Date

Texas State
Technical College
East Texas Center at Marshall

Course Syllabus

I. COURSE DESCRIPTION (catalog description)

DEPARTMENT: Pre-Technical Studies

COURSE: Math 060 Beginning Algebra I (2-3-3)
The purpose of this course is to give a background in pre-algebra and elementary algebraic concepts. It includes the concept of signed numbers, evaluating expressions, polynomials, operations with algebraic expressions, and factoring.

PREREQUISITE: MATH 050, or MATH placement test. (Developmental/No college credit granted)

II. COURSE GOALS AND OBJECTIVES:

Goal 1: Perform operations and applications with signed numbers.

Obj. 1a: Add and subtract signed numbers.

Sub-obj. 1a(1): Demonstrate the understanding of the meaning of signed numbers.
Sub-obj. 1a(2): Use absolute value.
Sub-obj. 1a(3): Add signed numbers.
Sub-obj. 1a(4): Subtract signed numbers.

Obj. 1b: Multiply and divide signed numbers.

Sub-obj. 1b(1): Multiply signed numbers.
Sub-obj. 1b(2): Divide signed numbers.

Goal 2: Perform operations with exponents and square roots.

Obj. 2a: Perform operations with exponents.

Sub-obj. 2a(1): Define exponent.
Sub-obj. 2a(2): Perform operations with exponents.
Sub-obj. 2a(3): Follow the order of operations with exponents.

Obj. 2b: Use square roots.

Sub-obj. 2b(1): Define square root.
Sub-obj. 2b(2): Compute square roots.

Goal 3: Perform the four basic operations with algebraic expressions.

Obj. 3a: Add and subtract algebraic expressions.

Sub-obj. 3a(1): Define variable, constant, and coefficient.
Sub-obj. 3a(2): Combine like terms.
Sub-obj. 3a(3): Simplify by removing parentheses.
Sub-obj. 3a(4): Add and subtract algebraic expressions.

Obj. 3b: Multiply and divide algebraic expressions.

Sub-obj. 3b(1): Multiply simple factors.
Sub-obj. 3b(2): Use the rules for multiplying numbers written in exponential form.
Sub-obj. 3b(3): Divide simple factors.
Sub-obj. 3b(4): Work with negative exponents.
Sub-obj. 3b(5): Multiply and divide algebraic expressions.

Goal 4: Demonstrate the understanding of factoring.

Obj. 4a: Demonstrate the understanding of factoring.

Sub-obj. 4a(1): Define factor.
Sub-obj. 4a(2): Find the factors of a whole number.

III. COURSE OUTLINE

Lecture/Lab

Students enrolled in Math 060 are scheduled in class for a period of 2 lecture hours per week and 3 lab hours per week.

Pre-Technical Studies is a self-paced, individualized program. For each course, students are given a diagnostic pre-test, a set of assignments over objectives they have not yet mastered (based on the diagnostic pre-test), and a comprehensive course mastery test.

In addition to scheduled lectures, one-on-one time with the instructor (based on the individual student's need) is considered to be part of the 2 hours of lecture per week.

CONTENT:

The content of the course is contained on the following pages.

Math 060, 070, or 101

Assignemnt Completion Record

Unit 6 (CHT) Pre - Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zcht0606 ***

Computer: Mathematics / Special Topics
Powers and Roots

Grade Date Completed

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying ______ ______
12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ______
12d Add and Subtract Positive and Negative Numbers ______ ______

6-1 Addition of Signed Numbers, pp. 241-249
Book: Exercise 6-1
A. - D. All evens
E. 2,3,4,5.................. ______ ______

6-2 Subtraction of Signed Numbers, pp. 249-253
Book: Exercise 6-2
A. All odds
B. 1,2,3,4,6,8............... ______ ______

JSEP Lessons:
13a Multiply and Divide Whole Numbers.. ______ ______
13d Multiply and Divide Negative and Positive Numbers ______ ______

6-3 Multiplication and Division of Signed Numbers, pp. 254-258
Book: Exercise 6-3
A., B. All evens
C. all problems.............. ______ ______

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 14 Exponents and Square Roots... ______ ______

6-4 Exponents and Square Roots, pp. 258-265
Book: Exercise 6-4
A., B. All odds
C. 1,2,3,6.................. ______ ______

Unit 6 Turn in exercises and ask for Test 6.
Unit 6 Exercises......... ______ ______

Math 060, 070, or 101

Assignemnt Completion Record

Unit 6 (INT) Pre - Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Grade **Date Completed**

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 12 Integers: Addition and Subtraction
_____ __________

6-1 Addition of Signed Numbers, pp. 241-249
Book: Exercise 6-1
A. - D. All evens
E. 2,3,4,5.................. _____ __________

6-2 Subtraction of Signed Numbers, pp. 249-253
Book: Exercise 6-2
A. All odds
B. 1,2,3,4,6,8.............. _____ __________

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 13 Integers: Multiplication and Division
_____ __________

6-3 Multiplication and Division of Signed Numbers, pp. 254-258
Book: Exercise 6-3
A., B. All evens
C. all problems............. _____ __________

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 14 Exponents and Square Roots... _____ __________

6-4 Exponents and Square Roots, pp. 258-265
Book: Exercise 6-4
A., B. All odds
C. 1,2,3,6.................. _____ __________

Unit 6 Turn in exercises and ask for Test 6.
Unit 6 Exercises......... _____ __________

Math 060, 070, or 101

Assignemnt Completion Record

Unit 6 (MET) Pre - Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Grade **Date Completed**

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 12 Integers: Addition and Subtraction
_____ __________

6-1 Addition of Signed Numbers, pp. 241-249
Book: Exercise 6-1
A. - D. All evens
E. 2,3,4,5..................._____ __________

6-2 Subtraction of Signed Numbers, pp. 249-253
Book: Exercise 6-2
A. All odds
B. 1,2,3,4,6,8..............._____ __________

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 13 Integers: Multiplication and Division
_____ __________

6-3 Multiplication and Division of Signed Numbers, pp. 254-258
Book: Exercise 6-3
A., B. All evens
C. all problems.............._____ __________

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 14 Exponents and Square Roots..._____ __________

6-4 Exponents and Square Roots, pp. 258-265
Book: Exercise 6-4
A., B. All odds
C. 1,2,3,6..................._____ __________

Unit 6 Turn in exercises and ask for Test 6.
Unit 6 Exercises........._____ __________

Math 060, 070, or 101

Assignemnt Completion Record

Unit 6 (OSH) Pre - Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*****   Course: zosh0606   *****

Computer: Skills Bank II

Grade   Date Completed

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 12 Integers: Addition and Subtraction
_____ _____

6-1 Addition of Signed Numbers, pp. 241-249
Book: Exercise 6-1
A. - D. All evens
E. 2,3,4,5.................. _____ _____

6-2 Subtraction of Signed Numbers, pp. 249-253
Book: Exercise 6-2
A. All odds
B. 1,2,3,4,6,8.............. _____ _____

JSEP Lessons:
13a Multiply and Divide Whole Numbers.. _____ _____
13d Multiply and Divide Negative and Positive Numbers
_____ _____

6-3 Multiplication and Division of Signed Numbers, pp. 254-258
Book: Exercise 6-3
A., B. All evens
C. all problems.............. _____ _____

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 14 Exponents and Square Roots... _____ _____

6-4 Exponents and Square Roots, pp. 258-265
Book: Exercise 6-4
A., B. All odds
C. 1,2,3,6.................. _____ _____

Unit 6 Turn in exercises and ask for Test 6.
Unit 6 Exercises......... _____ _____

Math 060, 070, or 101

Assignment Completion Record

Unit 7 (CHT) Basic Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Computer: JSEP
***** Course: zcht0607 *****

Grade   Date Completed

Skills Bank II (optional)
Geometry and Algebra:
Lesson 17 Simplifying Expressions...... ____   ________

7-1 Algebraic Language and Formulas, pp. 275-284
    Book: Exercise 7-1
        A., B. All evens
        C. 1,4,7,10,13,16,19,22...... ____   ________

7-2 Adding and Subtracting Algebraic Expressions, pp. 284-290
    Book: Exercise 7-2
        A., B. All odds............. ____   ________

Skills Bank II (optional)
Math Concepts:
Lesson 13 Missing Numbers in Equations. ____   ________

7-3 Solving Equations and Formulas, pp. 290- 310
    Book: Exercise 7-3
        A., B. All evens
        C. 1,4,7,10,13,15............ ____   ________

JSEP Lesson:
16h Use Word Problems................ ____   ________

7-4 Solving Word Problems, pp. 311-320
    Book: Exercise 7-4
        A. 1,4,7,10
        B. 1,4,7,10,13,16............ ____   ________

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying
____   ________

12b Add and Subtract Whole Numbers - Carrying and Borrowing
____   ________

13a Multiply and Divide Whole Numbers.. ____   ________
14b Reduce Fractions to Lowest Terms... ____   ________
14f Multiply and Divide Fractions...... ____   ________
16g Solve Problems Involving Ratio and Proportion

7-5 Ratio and Proportion, pp. 320-341
Book: Exercise 7-5
A. 1,3
B. All odds
C. 1,4
D. 1,4,7,10,13,16
E. 1,2......................____ ________

7-6 Multiplying and Dividing Algebraic Expressions, pp. 341-346
Book: Exercise 7-6
A., B. All evens............____ ________

Computer: Skills Bank II
Geometry and Algebra:
Lesson 15 Scientific Notation..........____ ________

7-7 Scientific Notation, pp. 346-352
Book: Exercise 7-7
A.,B.,C.,D. All odds..................________

Unit 7 Turn in exercises and ask for Test 7.
Unit 7 Exercises.........____ ________

Math 060, 070, or 101

Assignment Completion Record

Unit 7 (INT) Basic Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Grade   Date Completed

Skills Bank II (optional)
Geometry and Algebra:
Lesson 17 Simplifying Expressions......_____ ___________

7-1 Algebraic Language and Formulas, pp. 275-284
Book: Exercise 7-1
A., B. All evens
C. 1,4,7,10,13,16,19,22......_____ ___________

7-2 Adding and Subtracting Algebraic Expressions, pp. 284-290
Book: Exercise 7-2
A., B. All odds.............._____ ___________

Skills Bank II (optional)
Math Concepts:
Lesson 13 Missing Numbers in Equations._____ ___________

7-3 Solving Equations and Formulas, .pp. 290- 310
Book: Exercise 7-3
A., B. All evens
C. 1,4,7,10,13,15............_____ ___________

Skills Bank II (optional)
Word Problems:
Lesson 8 Needed Operations.............._____ ___________
Lesson 9 Needed Information............_____ ___________

7-4 Solving Word Problems, pp. 311-320
Book: Exercise 7-4
A. 1,4,7,10
B. 1,4,7,10,13,16............_____ ___________

Turn in Exercises 7-1 - 7-4 and ask for Test 7-1 - 7-4.

Skills Bank II (optional)
Math Computation:
Lesson 19 Ratio and Percent............_____ ___________

7-5 Ratio and Proportion, pp. 320-341
Book: Exercise 7-5
A. 1,3

B. All odds
C. 1,4
D. 1,4,7,10,13,16
E. 1,2......................_____ __________

7-6 Multiplying and Dividing Algebraic Expressions, pp. 341-346
Book: Exercise 7-6
A., B. All evens.............._____ __________

Computer: Skills Bank II
Geometry and Algebra:
Lesson 15 Scientific Notation.........._____ __________

7-7 Scientific Notation, pp. 346-352
Book: Exercise 7-7
A.,B.,C.,D. All odds..................__________

Turn in exercises 7-5 - 7-7 and ask for Test 7-5 - 7-7.
Unit 7 Exercises........._____ __________

Math 060, 070, or 101

Assignment Completion Record

Unit 7 (MET) Basic Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Grade   Date Completed

Skills Bank II (optional)
Geometry and Algebra:
Lesson 17 Simplifying Expressions......______   ____________

7-1 Algebraic Language and Formulas, pp. 275-284
Book: Exercise 7-1
A., B. All evens
C. 1,4,7,10,13,16,19,22......______   ____________

7-2 Adding and Subtracting Algebraic Expressions, pp. 284-290
Book: Exercise 7-2
A., B. All odds.............______   ____________

Skills Bank II (optional)
Math Concepts:
Lesson 13 Missing Numbers in Equations.______   ____________

7-3 Solving Equations and Formulas, pp. 290- 310
Book: Exercise 7-3
A., B. All evens
C. 1,4,7,10,13,15...........______   ____________

Skills Bank II (optional)
Word Problems:
Lesson 8 Needed Operations............______   ____________
Lesson 9 Needed Information...........______   ____________

7-4 Solving Word Problems, pp. 311-320
Book: Exercise 7-4
A. 1,4,7,10
B. 1,4,7,10,13,16...........______   ____________

Turn in Exercises 7-1 - 7-4 and ask for Test 7-1 - 7-4.

Skills Bank II (optional)
Math Computation:
Lesson 19 Ratio and Percent...........______   ____________

7-5 Ratio and Proportion, pp. 320-341
Book: Exercise 7-5
A. 1,3

B. All odds
C. 1,4
D. 1,4,7,10,13,16
E. 1,2......................_____ __________

7-6 Multiplying and Dividing Algebraic Expressions, pp. 341-346
Book: Exercise 7-6
A., B. All evens.............._____ __________

Computer: Skills Bank II
Geometry and Algebra:
Lesson 15 Scientific Notation.........._____ __________

7-7 Scientific Notation, pp. 346-352
Book: Exercise 7-7
A.,B.,C.,D. All odds...................__________

Turn in exercises 7-5 - 7-7 and ask for Test 7-5 - 7-7.
Unit 7 Exercises........._____ __________

15a Draw Plane Geometric Figures.......____ __________

9-3 Geometric Constructions, pp. 447-461 **(optional)**
Study the definitions of:
- bisecting a line segment
- bisecting an angle
- perpendicular
- parallel
- tangent.................................. __________

Turn in Unit 9 Exercises and ask for Unit 9 Test.

Math 060 or 070

Assignment Completion Record

Unit 9 (OSH) Solid Figures and Geometric Constructions

Textbook: Mathematics for the Trades

Computer: JSEP
***   Course: zosh0609   ***

Note - JSEP Lessons for Unit 9 will replace the Exercises for Unit 9. Unit 9 Exercises are optional.

JSEP Lessons:

10a Recognize Solid Figure Shapes and Match them to their Names ______ ______

15h Compute the Area and Volume of Rectangular Solids ______ ______

9-1 Prisms and Pyramids, pp. 423 - 436 **(optional)**
Exercises 9-1, pp.433 - 436
A. 1, 2, 4, 6, 7
D. 1, 2, 3........................ ______ ______

JSEP Lessons:

11a Identify Shape and Position Terms.. ______ ______
8b Identify Characteristics of Plane Shapes ______ ______

15f Compute the Area and Perimeter of a Rectangle ______ ______

12a Add and Subtract Whole Numbers - No Carrying ______ ______

12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ______

12c Add and Subtract Decimals.......... ______ ______
13a Multiply and Divide Whole Numbers.. ______ ______
13b Multiply and Divide Decimal Numbers ______ ______
15g Compute the Area and the Circumference of a Circle ______ ______

15i Use Formulas to Solve Problems Involving Geometric Figures ______ ______

9-2 Cylinders, Cones, and Spheres, pp. 436-447 **(optional)**
Exercises 9-2, pp. 444-446
A. 1-10 All (volume only)
C. 1, 2, 3........................ ______ ______

JSEP Lessons:

9d Draw Bisectors of Angles and Altitudes of Triangles ______ ______

15b Match Geometric Figures with Their Names ______ ______

15a Draw Plane Geometric Figures.......____ ____________

9-3 Geometric Constructions, pp. 447-461 **(optional)**
Study the definitions of:
- bisecting a line segment
- bisecting an angle
- perpendicular
- parallel
- tangent....................................____________

Turn in Unit 9 Exercises and ask for Unit 9 Test.

Assignment Completion Record

Math 060 or 070

Computer: Skills Bank II

Unit F Factoring

Grade Date Completed

Computer:
Concepts: Lesson 6................................ ____________
Lesson 7................................ ____________
Lesson 8................................ ____________
Lesson 9................................ ____________

Unit F Review lessons, then ask for Test F.
Unit F Lessons........................ ____________

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 060.1a Add and subtract signed numbers.

Competencies 52-55

IMPORTANCE OF OBJECTIVE

Signed numbers are used to represent positive and negative quantities.

STUDENT WILL

Be able to add and subtract signed numbers.

TO THIS STANDARD

Students will pass Quiz 060.1a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 060.1b Multiply and divide signed numbers.

Competencies 56-57

IMPORTANCE OF OBJECTIVE

Signed numbers are used to represent positive and negative quantities.

STUDENT WILL

Be able to multiply and divide signed numbers.

TO THIS STANDARD

Students will pass Quiz 060.1b with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 060.2a Perform operations with exponents.

Competencies 58-60

IMPORTANCE OF OBJECTIVE

Exponents are used when the same number appears many times in a multiplication.

STUDENT WILL

Be able to perform operations with exponents.

TO THIS STANDARD

Students will pass Quiz 060.2a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 060.2b Use square roots.

Competencies 61-62

IMPORTANCE OF OBJECTIVE

Square roots allow us to solve problems involving area.

STUDENT WILL

Be able to compute square roots.

TO THIS STANDARD

Students will pass Quiz 060.2b with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 060.3a Add and subtract algebraic expressions.

Competencies 63-66

IMPORTANCE OF OBJECTIVE

Manipulating expressions is a useful procedure in algebra.

STUDENT WILL

Be able to add and subtract algebraic expressions.

TO THIS STANDARD

Students will pass Quiz 060.3a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 060.3b Multiply and divide algebraic expressions.

Competencies 67-71

IMPORTANCE OF OBJECTIVE

Manipulating expressions is an important part of algebra.

STUDENT WILL

Be able to multiply and divide algebraic expressions.

TO THIS STANDARD

Students will pass Quiz 060.3b with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 060.4a Demonstrate the understanding of factoring.

Competencies 72-73

IMPORTANCE OF OBJECTIVE

It is sometimes necessary to break an expression into its factors.

STUDENT WILL

Be able to find the factors of a whole number.

TO THIS STANDARD

Students will pass Quiz 060.4a with a score of 70% or better.

IV. MATERIALS INVENTORY SHEET

The following materials are required for Math 060:

Textbook:
Mathematics for the Trades, 3rd ed., Carman and Saunders, Prentice-Hall Publishing Company.

Additional Materials:

No. 2 pencils

Loose-leaf notebook paper

An electronic calculator

V. GRADING/ATTENDANCE POLICY

Course grades are based on quizzes, tests, and attendance. A unit or objective is not considered to be complete unless the student has a grade of 70 or higher on the quiz or test covering the unit or objective.

Class is scheduled for five hours per week. If a student misses 10 or more hours of class, an excessive absence report will be filed on them with student services. If a student is absent for 5 hours or less during the quarter, they will receive an additional 5-point bonus on their course grade.

SCANS

The Three-Part Foundation competencies of SCANS is in the process of being fully integrated in Pre-Technical Mathematics.

These competencies are listed below.

Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens and speaks

A. Reading - locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules

B. Writing - not applicable to Pre-Technical Mathematics

C. Arithmetic/Mathematics - performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques

D. Listening - receives, attends to, interprets, and responds to verbal messages and other cues

E. Speaking - not applicable to Pre-Technical Mathematics

Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons

A. Creative Thinking - generates new ideas

B. Decision Making - specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative

C. Problem Solving - recognizes problems and devises and implements plan of action

D. Seeing Things in the Mind's Eye - organizes, and processes symbols, pictures, graphs, objects, and other information

E. Knowing How-to-Learn - uses efficient learning techniques to acquire and apply new knowledge and skills

F. Reasoning - discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem

Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty

A. Responsibility - exerts a high level of effort and perseveres toward goal attainment

B. Self-Esteem - believes in own self-worth and maintains a positive view of self

C. Sociability - demonstrates understanding, friendliness, adaptability, empathy, and politeness in group settings

D. Self-Management - assesses self accurately, sets personal goals, monitors progress, and exhibits self-control

E. Integrity/Honesty - chooses ethical courses of action

Texas State
Technical College
Waco/Marshall

COURSE SYLLABUS

Beginning Algebra II
Title

MATH 070
Number

Placement test or MATH 060
Prerequisite

Greg McDaniel
Prepared by

Approved by

6-9-94
Date

This Syllabus has been reviewed and is current on date indicated.

Reviewed by	Date

Texas State
Technical College
East Texas Center at Marshall

Course Syllabus

I. COURSE DESCRIPTION (catalog description)

DEPARTMENT: Pre-Technical Studies

COURSE: Math 070 Beginning Algebra II (2-3-3)
This course is a continuance of MATH 060, Beginning Algebra I. It begins with rational expressions, followed by linear and quadratic equations, formulas and work problems. A basic geometry section will also be included.

PREREQUISITE: MATH 060 (Developmental/No college credit granted)

II. COURSE GOALS AND OBJECTIVES:

Goal 1: Solve equations and formulas.

Obj. 1a: Solve equations.

Sub-obj. 1a(1): Define equivalent equations.
Sub-obj. 1a(2): Solve linear equations.

Obj. 1b: Solve formulas.

Sub-obj. 1b(1): Evaluate formulas.
Sub-obj. 1b(2): Solve a formula for an indicated variable.

Goal 2: Work with fractions in beginning algebra.

Obj. 2a: Solve problems with fractions in beginning algebra.

Sub-obj. 2a(1): Solve equations involving fractions.
Sub-obj. 2a(2): Define ratio.
Sub-obj. 2a(3): Define proportion.
Sub-obj. 2a(4): Solve proportions.
Sub-obj. 2a(5): Solve word problems involving ratio and proportion.
Sub-obj. 2a(6): Distinguish between direct and inverse proportions.

Goal 3: Solve word problems involving algebra.

Obj. 3a: Solve word problems involving algebra.

Sub-obj. 3a(1): Translate words to algebra.
Sub-obj. 3a(2): Translate sentences to equations.
Sub-obj. 3a(3): Solve word problems using algebraic models.

Goal 4: Use concepts of geometry.

Obj. 4a: Apply angle facts.

Sub-obj. 4a(1): Label angles.
Sub-obj. 4a(2): Measure angles.
Sub-obj. 4a(3): Classify angles by their measures.
Sub-obj. 4a(4): Apply angle facts.

Obj. 4b: Solve problems involving polygons.

Sub-obj. 4b(1): Define polygon.
Sub-obj. 4b(2): Compute the perimeter of a polygon.
Sub-obj. 4b(3): Compute the area of a polygon.
Sub-obj. 4b(4): Use the Pythagorean theorem.

Obj. 4c: Solve problems involving circles and volume.

Sub-obj. 4c(1): Compute the circumference of a circle.
Sub-obj. 4c(2): Identify the parts of a circle.
Sub-obj. 4c(3): Compute the area of a circle.
Sub-obj. 4c(4): Compute the volume of a prism or pyramid.
Sub-obj. 4c(5): Compute the volume of a cylinder, cone, or sphere.

III. COURSE OUTLINE

Lecture/Lab

Students enrolled in Math 070 are scheduled in class for a period of 2 lecture hours per week and 3 lab hours per week.

Pre-Technical Studies is a self-paced, individualized program. For each course, students are given a diagnostic pre-test, a set of assignments over objectives they have not yet mastered (based on the diagnostic pre-test), and a comprehensive course mastery test.

In addition to scheduled lectures, one-on-one time with the instructor (based on the individual student's need) is considered to be part of the 2 hours of lecture per week.

CONTENT:

The content of the course is contained on the following pages.

Math 060, 070, or 101

Assignemnt Completion Record

Unit 6 (CHT) Pre - Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zcht0606 ***

Computer: Mathematics / Special Topics
Powers and Roots

Grade Date Completed

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying ______ ______

12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ______

12d Add and Subtract Positive and Negative Numbers ______ ______

6-1 Addition of Signed Numbers, pp. 241-249
Book: Exercise 6-1
A. - D. All evens
E. 2,3,4,5.................. ______ ______

6-2 Subtraction of Signed Numbers, pp. 249-253
Book: Exercise 6-2
A. All odds
B. 1,2,3,4,6,8.............. ______ ______

JSEP Lessons:
13a Multiply and Divide Whole Numbers.. ______ ______
13d Multiply and Divide Negative and Positive Numbers ______ ______

6-3 Multiplication and Division of Signed Numbers, pp. 254-258
Book: Exercise 6-3
A., B. All evens
C. all problems.............. ______ ______

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 14 Exponents and Square Roots... ______ ______

6-4 Exponents and Square Roots, pp. 258-265
Book: Exercise 6-4
A., B. All odds
C. 1,2,3,6.................. ______ ______

Unit 6 Turn in exercises and ask for Test 6.
Unit 6 Exercises........ ______ ______

Math 060, 070, or 101

Assignemnt Completion Record

Unit 6 (INT) Pre - Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

	Grade	Date Completed
Computer: Skills Bank II (optional) Geometry and Algebra: Lesson 12 Integers: Addition and Subtraction	______	____________
6-1 Addition of Signed Numbers, pp. 241-249 Book: Exercise 6-1 A. - D. All evens E. 2,3,4,5..................	______	____________
6-2 Subtraction of Signed Numbers, pp. 249-253 Book: Exercise 6-2 A. All odds B. 1,2,3,4,6,8..............	______	____________
Computer: Skills Bank II (optional) Geometry and Algebra: Lesson 13 Integers: Multiplication and Division	______	____________
6-3 Multiplication and Division of Signed Numbers, pp. 254-258 Book: Exercise 6-3 A., B. All evens C. all problems..............	______	____________
Computer: Skills Bank II (optional) Geometry and Algebra: Lesson 14 Exponents and Square Roots...	______	____________
6-4 Exponents and Square Roots, pp. 258-265 Book: Exercise 6-4 A., B. All odds C. 1,2,3,6..................	______	____________
Unit 6 Turn in exercises and ask for Test 6. **Unit 6 Exercises........**	______	____________

Math 060, 070, or 101

Assignemnt Completion Record

Unit 6 (MET) Pre - Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Grade   Date Completed

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 12 Integers: Addition and Subtraction ______ ______

6-1 Addition of Signed Numbers, pp. 241-249
Book: Exercise 6-1
A. - D. All evens
E. 2,3,4,5..................______ ______

6-2 Subtraction of Signed Numbers, pp. 249-253
Book: Exercise 6-2
A. All odds
B. 1,2,3,4,6,8..............______ ______

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 13 Integers: Multiplication and Division ______ ______

6-3 Multiplication and Division of Signed Numbers, pp. 254-258
Book: Exercise 6-3
A., B. All evens
C. all problems.............______ ______

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 14 Exponents and Square Roots...______ ______

6-4 Exponents and Square Roots, pp. 258-265
Book: Exercise 6-4
A., B. All odds
C. 1,2,3,6..................______ ______

Unit 6 Turn in exercises and ask for Test 6.
Unit 6 Exercises..........______ ______

Math 060, 070, or 101

Assignemnt Completion Record

Unit 6 (OSH) Pre - Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zosh0606 ***

Computer: Skills Bank II

Grade Date Completed

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 12 Integers: Addition and Subtraction

6-1 Addition of Signed Numbers, pp. 241-249
Book: Exercise 6-1
A. - D. All evens
E. 2,3,4,5...................

6-2 Subtraction of Signed Numbers, pp. 249-253
Book: Exercise 6-2
A. All odds
B. 1,2,3,4,6,8...............

JSEP Lessons:
13a Multiply and Divide Whole Numbers..
13d Multiply and Divide Negative and Positive Numbers

6-3 Multiplication and Division of Signed Numbers, pp. 254-258
Book: Exercise 6-3
A., B. All evens
C. all problems.............

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 14 Exponents and Square Roots...

6-4 Exponents and Square Roots, pp. 258-265
Book: Exercise 6-4
A., B. All odds
C. 1,2,3,6..................

Unit 6 Turn in exercises and ask for Test 6.
Unit 6 Exercises........

Math 060, 070, or 101

Assignment Completion Record

Unit 7 (CHT) Basic Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Computer: JSEP
*** Course: zcht0607 ***

Grade Date Completed

Skills Bank II (optional)
Geometry and Algebra:
Lesson 17 Simplifying Expressions........ ______ ____________

7-1 Algebraic Language and Formulas, pp. 275-284
Book: Exercise 7-1
A., B. All evens
C. 1,4,7,10,13,16,19,22...... ______ ____________

7-2 Adding and Subtracting Algebraic Expressions, pp. 284-290
Book: Exercise 7-2
A., B. All odds............ ______ ____________

Skills Bank II (optional)
Math Concepts:
Lesson 13 Missing Numbers in Equations. ______ ____________

7-3 Solving Equations and Formulas, pp. 290- 310
Book: Exercise 7-3
A., B. All evens
C. 1,4,7,10,13,15........... ______ ____________

JSEP Lesson:
16h Use Word Problems................ ______ ____________

7-4 Solving Word Problems, pp. 311-320
Book: Exercise 7-4
A. 1,4,7,10
B. 1,4,7,10,13,16........... ______ ____________

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying ______ ____________
12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ____________
13a Multiply and Divide Whole Numbers.. ______ ____________
14b Reduce Fractions to Lowest Terms... ______ ____________
14f Multiply and Divide Fractions..... ______ ____________
16g Solve Problems Involving Ratio and Proportion

_____ __________

7-5 Ratio and Proportion, pp. 320-341
Book: Exercise 7-5
A. 1,3
B. All odds
C. 1,4
D. 1,4,7,10,13,16
E. 1,2...................... _____ __________

7-6 Multiplying and Dividing Algebraic Expressions, pp. 341-346
Book: Exercise 7-6
A., B. All evens............. _____ __________

Computer: Skills Bank II
Geometry and Algebra:
Lesson 15 Scientific Notation.......... _____ __________

7-7 Scientific Notation, pp. 346-352
Book: Exercise 7-7
A.,B.,C.,D. All odds.................... __________

Unit 7 Turn in exercises and ask for Test 7.
Unit 7 Exercises......... _____ __________

Math 060, 070, or 101

Assignment Completion Record

Unit 7 (INT) Basic Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Grade Date Completed

Skills Bank II (optional)
Geometry and Algebra:
Lesson 17 Simplifying Expressions...... _____ _____________

7-1 Algebraic Language and Formulas, pp. 275-284
Book: Exercise 7-1
A., B. All evens
C. 1,4,7,10,13,16,19,22...... _____ _____________

7-2 Adding and Subtracting Algebraic Expressions, pp. 284-290
Book: Exercise 7-2
A., B. All odds............. _____ _____________

Skills Bank II (optional)
Math Concepts:
Lesson 13 Missing Numbers in Equations. _____ _____________

7-3 Solving Equations and Formulas, pp. 290- 310
Book: Exercise 7-3
A., B. All evens
C. 1,4,7,10,13,15........... _____ _____________

Skills Bank II (optional)
Word Problems:
Lesson 8 Needed Operations............. _____ _____________
Lesson 9 Needed Information............ _____ _____________

7-4 Solving Word Problems, pp. 311-320
Book: Exercise 7-4
A. 1,4,7,10
B. 1,4,7,10,13,16........... _____ _____________

Turn in Exercises 7-1 - 7-4 and ask for Test 7-1 - 7-4.

Skills Bank II (optional)
Math Computation:
Lesson 19 Ratio and Percent........... _____ _____________

7-5 Ratio and Proportion, pp. 320-341
Book: Exercise 7-5
A. 1,3

B. All odds
C. 1,4
D. 1,4,7,10,13,16
E. 1,2...................... _____ __________

7-6 Multiplying and Dividing Algebraic Expressions, pp. 341-346
Book: Exercise 7-6
A., B. All evens............ _____ __________

Computer: Skills Bank II
Geometry and Algebra:
Lesson 15 Scientific Notation.......... _____ __________

7-7 Scientific Notation, pp. 346-352
Book: Exercise 7-7
A.,B.,C.,D. All odds.................. __________

Turn in exercises 7-5 - 7-7 and ask for Test 7-5 - 7-7.
Unit 7 Exercises......... _____ __________

BEST COPY AVAILABLE

Math 060, 070, or 101

Assignment Completion Record

Unit 7 (MET) Basic Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Grade Date Completed

Skills Bank II (optional)
Geometry and Algebra:
Lesson 17 Simplifying Expressions...... ______ ____________

7-1 Algebraic Language and Formulas, pp. 275-284
Book: Exercise 7-1
A., B. All evens
C. 1,4,7,10,13,16,19,22...... ______ ____________

7-2 Adding and Subtracting Algebraic Expressions, pp. 284-290
Book: Exercise 7-2
A., B. All odds............. ______ ____________

Skills Bank II (optional)
Math Concepts:
Lesson 13 Missing Numbers in Equations. ______ ____________

7-3 Solving Equations and Formulas,. pp. 290- 310
Book: Exercise 7-3
A., B. All evens
C. 1,4,7,10,13,15........... ______ ____________

Skills Bank II (optional)
Word Problems:
Lesson 8 Needed Operations............ ______ ____________
Lesson 9 Needed Information........... ______ ____________

7-4 Solving Word Problems, pp. 311-320
Book: Exercise 7-4
A. 1,4,7,10
B. 1,4,7,10,13,16........... ______ ____________

Turn in Exercises 7-1 - 7-4 and ask for Test 7-1 - 7-4.

Skills Bank II (optional)
Math Computation:
Lesson 19 Ratio and Percent........... ______ ____________

7-5 Ratio and Proportion, pp. 320-341
Book: Exercise 7-5
A. 1,3

B. All odds
C. 1,4
D. 1,4,7,10,13,16
E. 1,2........................_____ ___________

7-6 Multiplying and Dividing Algebraic Expressions, pp. 341-346
Book: Exercise 7-6
A., B. All evens.............._____ ___________

Computer: Skills Bank II
Geometry and Algebra:
Lesson 15 Scientific Notation.........._____ ___________

7-7 Scientific Notation, pp. 346-352
Book: Exercise 7-7
A.,B.,C.,D. All odds...................___________

Turn in exercises 7-5 - 7-7 **and ask for Test** 7-5 - 7-7.
Unit 7 **Exercises**........._____ ___________

Math 060, 070, or 101

Assignment Completion Record

Unit 7 (OSH) Basic Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Grade Date Completed

Skills Bank II (optional)
Geometry and Algebra:
Lesson 17 Simplifying Expressions......_____ __________

7-1 Algebraic Language and Formulas, pp. 275-284
Book: Exercise 7-1
A., B. All evens
C. 1,4,7,10,13,16,19,22......_____ __________

7-2 Adding and Subtracting Algebraic Expressions, pp. 284-290
Book: Exercise 7-2
A., B. All odds.............._____ __________

Skills Bank II (optional)
Math Concepts:
Lesson 13 Missing Numbers in Equations._____ __________

7-3 Solving Equations and Formulas, pp. 290- 310
Book: Exercise 7-3
A., B. All evens
C. 1,4,7,10,13,15............_____ __________

Skills Bank II (optional)
Word Problems:
Lesson 8 Needed Operations ...._____ __________
Lesson 9 Needed Information............._____ __________

7-4 Solving Word Problems, pp. 311-320
Book: Exercise 7-4
A. 1,4,7,10
B. 1,4,7,10,13,16............_____ __________

Turn in Exercises 7-1 - 7-4 and ask for Test 7-1 - 7-4.

Skills Bank II (optional)
Math Computation:
Lesson 19 Ratio and Percent............_____ __________

7-5 Ratio and Proportion, pp. 320-341
Book: Exercise 7-5
A. 1,3

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B. All odds
C. 1,4
D. 1,4,7,10,13,16
E. 1,2...................... _____ ___________

7-6 Multiplying and Dividing Algebraic Expressions, pp. 341-346
Book: Exercise 7-6
A., B. All evens............. _____ ___________

Computer: Skills Bank II
Geometry and Algebra:
Lesson 15 Scientific Notation.......... _____ ___________

7-7 Scientific Notation, pp. 346-352
Book: Exercise 7-7
A.,B.,C.,D. All odds.................. ___________

Turn in exercises 7-5 - 7-7 and ask for Test 7-5 - 7-7.
Unit 7 Exercises......... _____ ___________

Math 060 or 070

Assignment Completion Record

Unit 8 (CHT) Practical Plane Geometry

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zcht0608 ***

Note - JSEP Lessons for Unit 8 will replace all Exercises for Unit 8. All Unit 8 exercises are optional.

Grade Date Completed

JSEP Lessons:
1c Order Numbers in Specific Sequence.. _____ __________
2a Interpret the Markings on Linear Scales _____ __________

3a Use Degrees as Units of Angular Measurement of Temperature _____ __________

9a Identify Angles...................... _____ __________
3b Estimate the Size of an Angle not Greater than 180 Degrees _____ __________

11a Identify Shape and Position Terms.. _____ __________
7a Identify Points, Lines, Line Segments, and Rays _____ __________

8b Identify Characteristics of Plane Shapes _____ __________

12a Add and Subtract Whole Numbers - No Carrying _____ __________

12b Add and Subtract Whole Numbers - Carrying and Borrowing _____ __________

13a Multiply and Divide Whole Numbers.. _____ __________
7b Identify Parallel, Intersecting, and Other Lines _____ __________

7c Identify Perpendicular and Intersecting Lines _____ __________

8-1 Angle Measurement, pp. 361-372 **(optional)**
Book: Exercise 8-1
A., B. All problems.................... __________

JSEP Lessons:
15c Identify Parts of Geometric Figures _____ __________
8a Identify Geometric Shapes........... _____ __________
15f Compute the Area and Perimeter of a Rectangle _____ __________

8-2 Area and Perimeter of Polygons, pp. 372-385 **(optional)**
Book: Exercise 8-2
A., B. All problems.................... __________

JSEP Lessons:
9c Identify Types of Triangles........ _____ __________
15b Match Geometric Figures with Their Names
_____ __________

8-3 Triangles, pp. 385-403 **(optional)**
Exercises 8-3
A. 1,2,4,6,8,9,10,11,13,15
B. 1,3,4,5,6,8,9,10,11,12.................... __________

JSEP Lesson:
15a Draw Plane Geometric Figures....... _____ __________

8-4 Circles, pp. 403-414 **(optional)**
Exercises 8-4
A. All evens................................ __________

Turn in Unit 8 Exercises and ask for Unit 8 test.

Math 060 or Math 070

Assignment Completion Record

Unit 8 (INT) Practical Plane Geometry

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zint0608 ***

Note - JSEP Lessons for Unit 8 will replace all Exercises for Unit 8. All Unit 8 exercises are optional.

Grade Date Completed

JSEP Lessons:
1c Order Numbers in Specific Sequence.. ______ ____________
2a Interpret the Markings on Linear Scales ______ ____________
3a Use Degrees as Units of Angular Measurement of Temperature ______ ____________
9a Identify Angles...................... ______ ____________
3b Estimate the Size of an Angle not Greater than 180 Degrees ______ ____________
11a Identify Shape and Position Terms.. ______ ____________
7a Identify Points, Lines, Line Segments, and Rays ______ ____________
7b Identify Parallel, Intersecting, and Other Lines ______ ____________
7c Identify Perpendicular and Intersecting Lines ______ ____________

8-1 Angle Measurement, pp. 361-372 **(optional)**
Book: Exercise 8-1
A., B. All problems.................... ____________

JSEP Lessons:
15c Identify Parts of Geometric Figures ______ ____________
8a Identify Geometric Shapes........... ______ ____________
8b Identify Characteristics of Plane Shapes ______ ____________
15b Match Geometric Figures with Their Names ______ ____________
12a Add and Subtract Whole Numbers - No Carrying ______ ____________
12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ____________
13a Multiply and Divide Whole Numbers.. ______ ____________
15f Compute the Area and Perimeter of a Rectangle ______ ____________

8-2 Area and Perimeter of Polygons, pp. 372-385 **(optional)**

Book: Exercise 8-2
A., B. All problems.................... ____________

JSEP Lessons:
9b Identify Types of Angles............ ______ ____________
9c Identify Types of Triangles......... ______ ____________

8-3 Triangles, pp. 385-403 **(optional)**
Exercises 8-3
A. 1,2,4,6,8,9,10,11,13,15
B. 1,3,4,5,6,8,9,10,11,12.................... ____________

JSEP Lesson:
12c Add and Subtract Decimals.......... ______ ____________
13b Multiply and Divide Decimal Numbers ______ ____________
15g Compute the Area and the Circumference of a Circle
______ ____________

8-4 Circles, pp. 403-414 **(optional)**
Exercises 8-4
A. All evens................................ ____________

Turn in Unit 8 Exercises and ask for Unit 8 test.

Math 060 or Math 070

Assignment Completion Record

Unit 8 (MET) Practical Plane Geometry

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zmet0608 ***

Note - JSEP Lessons for Unit 8 will replace all Exercises for Unit 8. All Unit 8 exercises are optional.

Grade Date Completed

JSEP Lessons:
1c Order Numbers in Specific Sequence.. _____ _____________
2a Interpret the Markings on Linear Scales _____ _____________

3a Use Degrees as Units of Angular Measurement of Temperature _____ _____________

9a Identify Angles..................... _____ _____________
3b Estimate the Size of an Angle not Greater than 180 Degrees _____ _____________

11a Identify Shape and Position Terms.. _____ _____________
7a Identify Points, Lines, Line Segments, and Rays _____ _____________

7b Identify Parallel, Intersecting, and Other Lines _____ _____________

7c Identify Perpendicular and Intersecting Lines _____ _____________

8-1 Angle Measurement, pp. 361-372 **(optional)**
Book: Exercise 8-1
A., B. All problems...................... _____________

JSEP Lessons:
15c Identify Parts of Geometric Figures _____ _____________
8a Identify Geometric Shapes........... _____ _____________
8b Identify Characteristics of Plane Shapes _____ _____________

15b Match Geometric Figures with Their Names _____ _____________

12a Add and Subtract Whole Numbers - No Carrying _____ _____________

12b Add and Subtract Whole Numbers - Carrying and Borrowing _____ _____________

13a Multiply and Divide Whole Numbers.. _____ _____________
15f Compute the Area and Perimeter of a Rectangle _____ _____________

8-2 Area and Perimeter of Polygons, pp. 372-385 **(optional)**

Book: Exercise 8-2
A., B. All problems.................... __________

JSEP Lessons:
9b Identify Types of Angles............ _____ __________
9c Identify Types of Triangles......... _____ __________

8-3 Triangles, pp. 385-403 **(optional)**
Exercises 8-3
A. 1,2,4,6,8,9,10,11,13,15
B. 1,3,4,5,6,8,9,10,11,12.................... __________

JSEP Lesson:
12c Add and Subtract Decimals.......... _____ __________
13b Multiply and Divide Decimal Numbers _____ __________
15g Compute the Area and the Circumference of a Circle
_____ __________

8-4 Circles, pp. 403-414 **(optional)**
Exercises 8-4
A. All evens.................................. __________

Turn in Unit 8 Exercises and ask for Unit 8 test.

Math 060 or 070

Assignment Completion Record

Unit 8 (OSH) Practical Plane Geometry

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zosh0608 ***

Note - JSEP Lessons for Unit 8 will replace all Exercises for Unit 8. All Unit 8 exercises are optional.

Grade Date Completed

JSEP Lessons:
1c Order Numbers in Specific Sequence..______ ____________
2a Interpret the Markings on Linear Scales ______ ____________
3a Use Degrees as Units of Angular Measurement of Temperature ______ ____________
9a Identify Angles......................______ ____________
3b Estimate the Size of an Angle not Greater than 180 Degrees ______ ____________
11a Identify Shape and Position Terms..______ ____________
7a Identify Points, Lines, Line Segments, and Rays ______ ____________
7b Identify Parallel, Intersecting, and Other Lines ______ ____________
7c Identify Perpendicular and Intersecting Lines ______ ____________
9e Label Angles........................______ ____________

8-1 Angle Measurement, pp. 361-372 (optional)
Book: Exercise 8-1
A., B. All problems....................____________

JSEP Lessons:
10a Recognize Solid Figure Shapes and Match them to their Names ______ ____________
15b Match Geometric Figures with their Names ______ ____________
8b Identify Characteristics of Plane Shapes ______ ____________
12a Add and Subtract Whole Numbers - No Carrying ______ ____________
13a Multiply and Divide Whole Numbers..______ ____________
15f Compute the Area and Perimeter of a Rectangle ______ ____________

8-2 Area and Perimeter of Polygons, pp. 372-385 (optional)
Book: Exercise 8-2

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A., B. All problems.................... __________

JSEP Lessons:
9b Identify Types of Angles............ _____ __________
9c Identify Types of Triangles......... _____ __________

8-3 Triangles, pp. 385-403 (optional)
Exercises 8-3
A. 1,2,4,6,8,9,10,11,13,15
B. 1,3,4,5,6,8,9,10,11,12.................... __________

JSEP Lesson:
13b Multiply and Divide Decimal Numbers_____ __________
15g Compute the Area and the Circumference of a Circle
_____ __________

8-4 Circles, pp. 403-414 (optional)
Exercises 8-4
A. All evens................................. __________

Turn in Unit 8 Exercises and ask for Unit 8 test.

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Math 060 or 070

Assignment Completion Record

Unit 9 (CHT) Solid Figures and Geometric Constructions

Textbook: Mathematics for the Trades

Computer: JSEP
***   Course: zcht0609   ***

Note - JSEP Lessons for Unit 9 will replace the Exercises for Unit 9. Unit 9 Exercises are optional.

JSEP Lessons:
10a Recognize Solid Figure Shapes and Match them to their Names ______ ______

11a Identify Shape and Position Terms.. ______ ______
15h Compute the Area and Volume of Rectangular Solids ______ ______

9-1 Prisms and Pyramids, pp. 423 - 436 (optional)
Exercises 9-1, pp.433 - 436
A. 1, 2, 4, 6, 7
D. 1, 2, 3........................ ______ ______

JSEP Lessons:
15f Compute the Area and Perimeter of a Rectangle ______ ______

15g Compute the Area and the Circumference of a Circle ______ ______

15i Use Formulas to Solve Problems Involving Geometric Figures ______ ______

9-2 Cylinders, Cones, and Spheres, pp. 436-447 (optional)
Exercises 9-2, pp. 444-446
A. 1-10 All (volume only)
C. 1, 2, 3........................ ______ ______

JSEP Lessons:
15b Match Geometric Figures with Their Names ______ ______

15a Draw Plane Geometric Figures....... ______ ______

9-3 Geometric Constructions, pp. 447-461 (optional)
Study the definitions of:
- bisecting a line segment
- bisecting an angle
- perpendicular
- parallel
- tangent.................................. ______

Turn in Unit 9 Exercises and ask for Unit 9 Test.

Math 060 or 070

Assignment Completion Record

Unit 9 (INT) Solid Figures and Geometric Constructions

Textbook: Mathematics for the Trades

Computer: JSEP
*** Course: zint0609 ***

Note - JSEP Lessons for Unit 9 will replace the Exercises for Unit 9. Unit 9 Exercises are optional.

JSEP Lessons:
10a Recognize Solid Figure Shapes and Match them to their Names _____ _____
15h Compute the Area and Volume of Rectangular Solids _____ _____

9-1 Prisms and Pyramids, pp. 423 - 436 (optional)
Exercises 9-1, pp.433 - 436
A. 1, 2, 4, 6, 7
D. 1, 2, 3........................ _____ _____

JSEP Lessons:
11a Identify Shape and Position Terms.. _____ _____
8b Identify Characteristics of Plane Shapes _____ _____
15f Compute the Area and Perimeter of a Rectangle _____ _____
12a Add and Subtract Whole Numbers - No Carrying _____ _____
12b Add and Subtract Whole Numbers - Carrying and Borrowing _____ _____
12c Add and Subtract Decimals.......... _____ _____
13a Multiply and Divide Whole Numbers.. _____ _____
13b Multiply and Divide Decimal Numbers _____ _____
15g Compute the Area and the Circumference of a Circle _____ _____
15i Use Formulas to Solve Problems Involving Geometric Figures _____ _____

9-2 Cylinders, Cones, and Spheres, pp. 436-447 (optional)
Exercises 9-2, pp. 444-446
A. 1-10 All (volume only)
C. 1, 2, 3........................ _____ _____

JSEP Lessons:
9d Draw Bisectors of Angles and Altitudes of Triangles _____ _____
15b Match Geometric Figures with Their Names _____ _____

15a Draw Plane Geometric Figures.......____ ____________

9-3 Geometric Constructions, pp. 447-461 (optional)
Study the definitions of:
- bisecting a line segment
- bisecting an angle
- perpendicular
- parallel
- tangent...................................____________

Turn in Unit 9 Exercises and ask for Unit 9 Test.

Math 060 or 070

Assignment Completion Record

Unit 9 (MET) Solid Figures and Geometric Constructions

Textbook: Mathematics for the Trades

Computer: JSEP
***   Course: zmet0609   ***

Note - JSEP Lessons for Unit 9 will replace the Exercises for Unit 9. Unit 9 Exercises are optional.

JSEP Lessons:
10a Recognize Solid Figure Shapes and Match them to their Names ______ ______

15h Compute the Area and Volume of Rectangular Solids ______ ______

9-1 Prisms and Pyramids, pp. 423 - 436 **(optional)**
Exercises 9-1, pp.433 - 436
A. 1, 2, 4, 6, 7
B. 1, 2, 3........................ ______ ______

JSEP Lessons:
11a Identify Shape and Position Terms.. ______ ______
8b Identify Characteristics of Plane Shapes ______ ______

15f Compute the Area and Perimeter of a Rectangle ______ ______

12a Add and Subtract Whole Numbers - No Carrying ______ ______

12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ______

12c Add and Subtract Decimals.......... ______ ______
13a Multiply and Divide Whole Numbers.. ______ ______
13b Multiply and Divide Decimal Numbers ______ ______
15g Compute the Area and the Circumference of a Circle ______ ______

15i Use Formulas to Solve Problems Involving Geometric Figures ______ ______

9-2 Cylinders, Cones, and Spheres, pp. 436-447 **(optional)**
Exercises 9-2, pp. 444-446
A. 1-10 All (volume only)
C. 1, 2, 3........................ ______ ______

JSEP Lessons:
9d Draw Bisectors of Angles and Altitudes of Triangles ______ ______

15b Match Geometric Figures with Their Names ______ ______

15a Draw Plane Geometric Figures....... ______ ____________

9-3 Geometric Constructions, pp. 447-461 (optional)
Study the definitions of:
- bisecting a line segment
- bisecting an angle
- perpendicular
- parallel
- tangent.................................... ____________

Turn in Unit 9 Exercises and ask for Unit 9 Test.

Math 060, 070, or 101

Assignment Completion Record

Unit 7 (OSH) Basic Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Grade   Date Completed

Skills Bank II (optional)
Geometry and Algebra:
Lesson 17 Simplifying Expressions......_____   ___________

7-1 Algebraic Language and Formulas, pp. 275-284
Book: Exercise 7-1
A., B. All evens
C. 1,4,7,10,13,16,19,22......_____   ___________

7-2 Adding and Subtracting Algebraic Expressions, pp. 284-290
Book: Exercise 7-2
A., B. All odds.............._____   ___________

Skills Bank II (optional)
Math Concepts:
Lesson 13 Missing Numbers in Equations._____   ___________

7-3 Solving Equations and Formulas, pp. 290- 310
Book: Exercise 7-3
A., B. All evens
C. 1,4,7,10,13,15............_____   ___________

Skills Bank II (optional)
Word Problems:
Lesson 8 Needed Operations.............._____   ___________
Lesson 9 Needed Information............_____   ___________

7-4 Solving Word Problems, pp. 311-320
Book: Exercise 7-4
A. 1,4,7,10
B. 1,4,7,10,13,16............_____   ___________

Turn in Exercises 7-1 - 7-4 and ask for Test 7-1 - 7-4.

Skills Bank II (optional)
Math Computation:
Lesson 19 Ratio and Percent............_____   ___________

7-5 Ratio and Proportion, pp. 320-341
Book: Exercise 7-5
A. 1,3

B. All odds
C. 1,4
D. 1,4,7,10,13,16
E. 1,2........................_____ __________

7-6 Multiplying and Dividing Algebraic Expressions, pp. 341-346
Book: Exercise 7-6
A., B. All evens.............._____ __________

Computer: Skills Bank II
Geometry and Algebra:
Lesson 15 Scientific Notation.........._____ __________

7-7 Scientific Notation, pp. 346-352
Book: Exercise 7-7
A.,B.,C.,D. All odds..................__________

Turn in exercises 7-5 - 7-7 and ask for Test 7-5 - 7-7.
Unit 7 Exercises........._____ __________

Math 060 or 070

Assignment Completion Record

Unit 8 (CHT) Practical Plane Geometry

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zcht0608 ***

Note - JSEP Lessons for Unit 8 will replace all Exercises for Unit 8. All Unit 8 exercises are optional.

Grade Date Completed

JSEP Lessons:
1c Order Numbers in Specific Sequence.. _____ __________
2a Interpret the Markings on Linear Scales
_____ __________
3a Use Degrees as Units of Angular Measurement of Temperature
_____ __________
9a Identify Angles.................... _____ __________
3b Estimate the Size of an Angle not Greater than 180 Degrees
_____ __________
11a Identify Shape and Position Terms.. _____ __________
7a Identify Points, Lines, Line Segments, and Rays
_____ __________
8b Identify Characteristics of Plane Shapes
_____ __________
12a Add and Subtract Whole Numbers - No Carrying
_____ __________
12b Add and Subtract Whole Numbers - Carrying and Borrowing
_____ __________
13a Multiply and Divide Whole Numbers.. _____ __________
7b Identify Parallel, Intersecting, and Other Lines
_____ __________
7c Identify Perpendicular and Intersecting Lines
_____ __________

8-1 Angle Measurement, pp. 361-372 **(optional)**
Book: Exercise 8-1
A., B. All problems.................. __________

JSEP Lessons:
15c Identify Parts of Geometric Figures _____ __________
8a Identify Geometric Shapes........... _____ __________
15f Compute the Area and Perimeter of a Rectangle
_____ __________

8-2 Area and Perimeter of Polygons, pp. 372-385 **(optional)**
Book: Exercise 8-2
A., B. All problems.................. __________

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JSEP Lessons:
9c Identify Types of Triangles........._____ ____________
15b Match Geometric Figures with Their Names
_____ ____________

8-3 Triangles, pp. 385-403 **(optional)**
Exercises 8-3
A. 1,2,4,6,8,9,10,11,13,15
B. 1,3,4,5,6,8,9,10,11,12....................____________

JSEP Lesson:
15a Draw Plane Geometric Figures......._____ ____________

8-4 Circles, pp. 403-414 **(optional)**
Exercises 8-4
A. All evens....................................____________

Turn in Unit 8 Exercises and ask for Unit 8 test.

Math 060 or Math 070

Assignment Completion Record

Unit 8 (INT) Practical Plane Geometry

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zint0608 ***

Note - JSEP Lessons for Unit 8 will replace all Exercises for Unit 8. All Unit 8 exercises are optional.

Grade Date Completed

JSEP Lessons:
1c Order Numbers in Specific Sequence..______ ____________
2a Interpret the Markings on Linear Scales
______ ____________
3a Use Degrees as Units of Angular Measurement of Temperature
______ ____________
9a Identify Angles.....................______ ____________
3b Estimate the Size of an Angle not Greater than 180 Degrees
______ ____________
11a Identify Shape and Position Terms..______ ____________
7a Identify Points, Lines, Line Segments, and Rays
______ ____________
7b Identify Parallel, Intersecting, and Other Lines
______ ____________
7c Identify Perpendicular and Intersecting Lines
______ ____________

8-1 Angle Measurement, pp. 361-372 **(optional)**
Book: Exercise 8-1
A., B. All problems....................____________

JSEP Lessons:
15c Identify Parts of Geometric Figures______ ____________
8a Identify Geometric Shapes...........______ ____________
8b Identify Characteristics of Plane Shapes
______ ____________
15b Match Geometric Figures with Their Names
______ ____________
12a Add and Subtract Whole Numbers - No Carrying
______ ____________
12b Add and Subtract Whole Numbers - Carrying and Borrowing
______ ____________
13a Multiply and Divide Whole Numbers..______ ____________
15f Compute the Area and Perimeter of a Rectangle
______ ____________

8-2 Area and Perimeter of Polygons, pp. 372-385 **(optional)**

Book: Exercise 8-2
A., B. All problems...................______

JSEP Lessons:
9b Identify Types of Angles............______ ______
9c Identify Types of Triangles.........______ ______

8-3 Triangles, pp. 385-403 **(optional)**
Exercises 8-3
A. 1,2,4,6,8,9,10,11,13,15
B. 1,3,4,5,6,8,9,10,11,12...................______

JSEP Lesson:
12c Add and Subtract Decimals..........______ ______
13b Multiply and Divide Decimal Numbers______ ______
15g Compute the Area and the Circumference of a Circle
______ ______

8-4 Circles, pp. 403-414 **(optional)**
Exercises 8-4
A. All evens...............................______

Turn in Unit 8 Exercises and ask for Unit 8 test.

Math 060 or Math 070

Assignment Completion Record

Unit 8 (MET) Practical Plane Geometry

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zmet0608 ***

Note - JSEP Lessons for Unit 8 will replace all Exercises for Unit 8. All Unit 8 exercises are optional.

Grade Date Completed

JSEP Lessons:
1c Order Numbers in Specific Sequence.. ______ ____________
2a Interpret the Markings on Linear Scales ______ ____________
3a Use Degrees as Units of Angular Measurement of Temperature ______ ____________
9a Identify Angles..................... ______ ____________
3b Estimate the Size of an Angle not Greater than 180 Degrees ______ ____________
11a Identify Shape and Position Terms.. ______ ____________
7a Identify Points, Lines, Line Segments, and Rays ______ ____________
7b Identify Parallel, Intersecting, and Other Lines ______ ____________
7c Identify Perpendicular and Intersecting Lines ______ ____________

8-1 Angle Measurement, pp. 361-372 **(optional)**
Book: Exercise 8-1
A., B. All problems.................... ____________

JSEP Lessons:
15c Identify Parts of Geometric Figures ______ ____________
8a Identify Geometric Shapes........... ______ ____________
8b Identify Characteristics of Plane Shapes ______ ____________
15b Match Geometric Figures with Their Names ______ ____________
12a Add and Subtract Whole Numbers - No Carrying ______ ____________
12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ____________
13a Multiply and Divide Whole Numbers.. ______ ____________
15f Compute the Area and Perimeter of a Rectangle ______ ____________

8-2 Area and Perimeter of Polygons, pp. 372-385 **(optional)**

Book: Exercise 8-2
A., B. All problems.................... ___________

JSEP Lessons:
9b Identify Types of Angles............ _____ ___________
9c Identify Types of Triangles......... _____ ___________

8-3 Triangles, pp. 385-403 **(optional)**
Exercises 8-3
A. 1,2,4,6,8,9,10,11,13,15
B. 1,3,4,5,6,8,9,10,11,12.................... ___________

JSEP Lesson:
12c Add and Subtract Decimals.......... _____ ___________
13b Multiply and Divide Decimal Numbers_____ ___________
15g Compute the Area and the Circumference of a Circle
_____ ___________

8-4 Circles, pp. 403-414 **(optional)**
Exercises 8-4
A. All evens.................................. ___________

Turn in Unit 8 Exercises and ask for Unit 8 test.

Math 060 or 070

Assignment Completion Record

Unit 8 (OSH) Practical Plane Geometry

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
***   Course: zosh0608   ***

Note - JSEP Lessons for Unit 8 will replace all Exercises for Unit 8. All Unit 8 exercises are optional.

Grade   Date Completed

JSEP Lessons:

1c Order Numbers in Specific Sequence.. _____ ____________
2a Interpret the Markings on Linear Scales _____ ____________
3a Use Degrees as Units of Angular Measurement of Temperature _____ ____________
9a Identify Angles..................... _____ ____________
3b Estimate the Size of an Angle not Greater than 180 Degrees _____ ____________
11a Identify Shape and Position Terms.. _____ ____________
7a Identify Points, Lines, Line Segments, and Rays _____ ____________
7b Identify Parallel, Intersecting, and Other Lines _____ ____________
7c Identify Perpendicular and Intersecting Lines _____ ____________
9e Label Angles...................... _____ ____________

8-1 Angle Measurement, pp. 361-372 **(optional)**
Book: Exercise 8-1
A., B. All problems.................. ____________

JSEP Lessons:

10a Recognize Solid Figure Shapes and Match them to their Names _____ ____________
15b Match Geometric Figures with their Names _____ ____________
8b Identify Characteristics of Plane Shapes _____ ____________
12a Add and Subtract Whole Numbers - No Carrying _____ ____________
13a Multiply and Divide Whole Numbers.. _____ ____________
15f Compute the Area and Perimeter of a Rectangle _____ ____________

8-2 Area and Perimeter of Polygons, pp. 372-385 **(optional)**
Book: Exercise 8-2

A., B. All problems.................... ____________

JSEP Lessons:
9b Identify Types of Angles............ ______ ____________
9c Identify Types of Triangles......... ______ ____________

8-3 Triangles, pp. 385-403 **(optional)**
Exercises 8-3
A. 1,2,4,6,8,9,10,11,13,15
B. 1,3,4,5,6,8,9,10,11,12.................... ____________

JSEP Lesson:
13b Multiply and Divide Decimal Numbers ______ ____________
15g Compute the Area and the Circumference of a Circle
______ ____________

8-4 Circles, pp. 403-414 **(optional)**
Exercises 8-4
A. All evens................................ ____________

Turn in Unit 8 Exercises and ask for Unit 8 test.

Math 060 or 070

Assignment Completion Record

Unit 9 (CHT) Solid Figures and Geometric Constructions

Textbook: Mathematics for the Trades

Computer: JSEP
***   Course: zcht0609   ***

Note - JSEP Lessons for Unit 9 will replace the Exercises for Unit 9. Unit 9 Exercises are optional.

JSEP Lessons:
10a Recognize Solid Figure Shapes and Match them to their Names
______ ____________
11a Identify Shape and Position Terms..______ ____________
15h Compute the Area and Volume of Rectangular Solids
______ ____________

9-1 Prisms and Pyramids, pp. 423 - 436 **(optional)**
Exercises 9-1, pp.433 - 436
A. 1, 2, 4, 6, 7
D. 1, 2, 3........................______ ____________

JSEP Lessons:
15f Compute the Area and Perimeter of a Rectangle
______ ____________
15g Compute the Area and the Circumference of a Circle
______ ____________
15i Use Formulas to Solve Problems Involving Geometric Figures
______ ____________

9-2 Cylinders, Cones, and Spheres, pp. 436-447 **(optional)**
Exercises 9-2, pp. 444-446
A. 1-10 All (volume only)
C. 1, 2, 3........................______ ____________

JSEP Lessons:
15b Match Geometric Figures with Their Names
______ ____________
15a Draw Plane Geometric Figures.......______ ____________

9-3 Geometric Constructions, pp. 447-461 **(optional)**
Study the definitions of:
- bisecting a line segment
- bisecting an angle
- perpendicular
- parallel
- tangent...................................____________

Turn in Unit 9 Exercises and ask for Unit 9 Test.

Math 060 or 070

Assignment Completion Record

Unit 9 (INT) Solid Figures and Geometric Constructions

Textbook: Mathematics for the Trades

Computer: JSEP
*** Course: zint0609 ***

Note - JSEP Lessons for Unit 9 will replace the Exercises for Unit 9. Unit 9 Exercises are optional.

JSEP Lessons:
10a Recognize Solid Figure Shapes and Match them to their Names ______ ______

15h Compute the Area and Volume of Rectangular Solids ______ ______

9-1 Prisms and Pyramids, pp. 423 - 436 **(optional)**
Exercises 9-1, pp.433 - 436
A. 1, 2, 4, 6, 7
D. 1, 2, 3.......................... ______ ______

JSEP Lessons:
11a Identify Shape and Position Terms.. ______ ______
8b Identify Characteristics of Plane Shapes ______ ______

15f Compute the Area and Perimeter of a Rectangle ______ ______

12a Add and Subtract Whole Numbers - No Carrying ______ ______

12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ______

12c Add and Subtract Decimals.......... ______ ______
13a Multiply and Divide Whole Numbers.. ______ ______
13b Multiply and Divide Decimal Numbers ______ ______
15g Compute the Area and the Circumference of a Circle ______ ______

15i Use Formulas to Solve Problems Involving Geometric Figures ______ ______

9-2 Cylinders, Cones, and Spheres, pp. 436-447 **(optional)**
Exercises 9-2, pp. 444-446
A. 1-10 All (volume only)
C. 1, 2, 3......................... ______ ______

JSEP Lessons:
9d Draw Bisectors of Angles and Altitudes of Triangles ______ ______

15b Match Geometric Figures with Their Names ______ ______

15a Draw Plane Geometric Figures......._____. ___________

9-3 Geometric Constructions, pp. 447-461 **(optional)**
Study the definitions of:
- bisecting a line segment
- bisecting an angle
- perpendicular
- parallel
- tangent..................................___________

Turn in Unit 9 Exercises and ask for Unit 9 Test.

Math 060 or 070

Assignment Completion Record

Unit 9 (MET) Solid Figures and Geometric Constructions

Textbook: Mathematics for the Trades

Computer: JSEP
*** Course: zmet0609 ***

Note - JSEP Lessons for Unit 9 will replace the Exercises for Unit 9. Unit 9 Exercises are optional.

JSEP Lessons:
10a Recognize Solid Figure Shapes and Match them to their Names ______ __________

15h Compute the Area and Volume of Rectangular Solids ______ __________

9-1 Prisms and Pyramids, pp. 423 - 436 **(optional)**
Exercises 9-1, pp.433 - 436
A. 1, 2, 4, 6, 7
D. 1, 2, 3........................ ______ __________

JSEP Lessons:
11a Identify Shape and Position Terms.. ______ __________
8b Identify Characteristics of Plane Shapes ______ __________

15f Compute the Area and Perimeter of a Rectangle ______ __________

12a Add and Subtract Whole Numbers - No Carrying ______ __________

12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ __________

12c Add and Subtract Decimals.......... ______ __________
13a Multiply and Divide Whole Numbers.. ______ __________
13b Multiply and Divide Decimal Numbers ______ __________
15g Compute the Area and the Circumference of a Circle ______ __________

15i Use Formulas to Solve Problems Involving Geometric Figures ______ __________

9-2 Cylinders, Cones, and Spheres, pp. 436-447 **(optional)**
Exercises 9-2, pp. 444-446
A. 1-10 All (volume only)
C. 1, 2, 3........................ ______ __________

JSEP Lessons:
9d Draw Bisectors of Angles and Altitudes of Triangles ______ __________

15b Match Geometric Figures with Their Names ______ __________

Math 060 or 070

Assignment Completion Record

Unit 9 (OSH) Solid Figures and Geometric Constructions

Textbook: Mathematics for the Trades

Computer: JSEP
***   Course: zosh0609   ***

Note - JSEP Lessons for Unit 9 will replace the Exercises for Unit 9. Unit 9 Exercises are optional.

JSEP Lessons:
10a Recognize Solid Figure Shapes and Match them to their Names ______ ______

15h Compute the Area and Volume of Rectangular Solids ______ ______

9-1 Prisms and Pyramids, pp. 423 - 436 (optional)
Exercises 9-1, pp.433 - 436
A. 1, 2, 4, 6, 7
D. 1, 2, 3........................ ______ ______

JSEP Lessons:
11a Identify Shape and Position Terms.. ______ ______
8b Identify Characteristics of Plane Shapes ______ ______

15f Compute the Area and Perimeter of a Rectangle ______ ______

12a Add and Subtract Whole Numbers - No Carrying ______ ______

12b Add and Subtract Whole Numbers - Carrying and Borrowing ______ ______

12c Add and Subtract Decimals.......... ______ ______
13a Multiply and Divide Whole Numbers.. ______ ______
13b Multiply and Divide Decimal Numbers ______ ______
15g Compute the Area and the Circumference of a Circle ______ ______

15i Use Formulas to Solve Problems Involving Geometric Figures ______ ______

9-2 Cylinders, Cones, and Spheres, pp. 436-447 (optional)
Exercises 9-2, pp. 444-446
A. 1-10 All (volume only)
C. 1, 2, 3........................ ______ ______

JSEP Lessons:
9d Draw Bisectors of Angles and Altitudes of Triangles ______ ______

15b Match Geometric Figures with Their Names ______ ______

15a Draw Plane Geometric Figures.......____ ____________

9-3 Geometric Constructions, pp. 447-461 **(optional)**
Study the definitions of:
- bisecting a line segment
- bisecting an angle
- perpendicular
- parallel
- tangent....................................____________

Turn in Unit 9 Exercises and ask for Unit 9 Test.

Assignment Completion Record

Math 060 or 070

Computer: Skills Bank II

Unit F Factoring

Grade Date Completed

Computer:
Concepts: Lesson 6.................................____________
Lesson 7.................................____________
Lesson 8.................................____________
Lesson 9.................................____________

Unit F **Review lessons, then ask for Test F.**
Unit F Lessons.....................____________

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TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 070.1a Solve equations.

Competencies 75-77

IMPORTANCE OF OBJECTIVE

Equations are an integral part of algebra.

STUDENT WILL

Be able to solve linear equations.

TO THIS STANDARD

Students will pass Quiz 070.1a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 070.1b Solve formulas.

Competencies 74 and 77

IMPORTANCE OF OBJECTIVE

Very often a formula is not written in the form that is most useful. To use it you may need to rewrite the formula, solving it for the letter whose value you need to calculate.

STUDENT WILL

Be able to manipulate formulas.

TO THIS STANDARD

Students will pass Quiz 070.1b with a score of 70% or better.

INSTRUMENTATION TECHNOLOGY

ECC						
DEVELOP PROCESS CONTROL SYSTEM	**COMPETENCY NUMBER**					
	1004	1104	1203	1404	1503	160
NIET.08.01						
Understand fundamentals and comtemporary process control theory.			3B			
NIET.08.02						
Select Electronic and Pneumatic devices used in measurement and control.						
NIET.08.03						
Knowledge of valve sizing and actuator selection aiterice.						
WORK KEYS SKILL						
READ FOR INFO		5	5	5	5	6
APPLIED MATH		7	7	7	7	7
LISTENING	4	5	4	4	4	7
WRITING	3	3	3	3	3	3
LOCATING INFO	4	4	6	5	6	6
TEAMWORK	3	3	3	3	3	3
APPLIED TECHNOLOGY	4	5	6	6	6	6

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 070.2a Solve problems with fractions in beginning algebra.

Competencies 78-83

IMPORTANCE OF OBJECTIVE

Technical workers use the ideas of ratio and proportion to solve very many technical problems.

STUDENT WILL

Be able to solve ratios and proportions.

TO THIS STANDARD

Students will pass Quiz 070.2a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 070.3a Solve word problems involving algebra.

Competencies 84-86

IMPORTANCE OF OBJECTIVE

Algebra is a very useful tool for solving real problems.

STUDENT WILL

Be able to solve word problems using algebraic models.

TO THIS STANDARD

Students will pass Quiz 070.3a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 070.4a Apply angle facts.

Competencies 87-90

IMPORTANCE OF OBJECTIVE

Knowing angle facts is useful throughout geometry and trigonometry.

STUDENT WILL

Be able to measure angles and apply angle facts.

TO THIS STANDARD

Students will pass Quiz 070.4a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 070.4b Solve problems involving polygons.

Competencies 91-94

IMPORTANCE OF OBJECTIVE

An understanding of polygons is important for every technical worker.

STUDENT WILL

Be able to compute the perimeter and area of a polygon.

TO THIS STANDARD

Students will pass Quiz 070.4b with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 070.4c Solve problems involving circles and volumes.

Competencies 95-99

IMPORTANCE OF OBJECTIVE

Technical workers must be able to identify solid figures and their component parts, and compute their volume.

STUDENT WILL

Be able to solve problems involving circles and volume.

TO THIS STANDARD

Students will pass Quiz 070.4c with a score of 70% or better.

IV. MATERIALS INVENTORY SHEET

The following materials are required for Math 070:

Textbook:
Mathematics for the Trades, 3rd ed., Carman and Saunders, Prentice-Hall Publishing Company.

Additional Materials:

No. 2 pencils

Loose-leaf notebook paper

An electronic calculator

A protractor

V. GRADING/ATTENDANCE POLICY

Course grades are based on quizzes, tests, and attendance. A unit or objective is not considered to be complete unless the student has a grade of 70 or higher on the quiz or test covering the unit or objective.

Class is scheduled for five hours per week. If a student misses 10 or more hours of class, an excessive absence report will be filed on them with student services. If a student is absent for 5 hours or less during the quarter, they will receive an additional 5-point bonus on their course grade.

SCANS

The Three-Part Foundation competencies of SCANS is in the process of being fully integrated in Pre-Technical Mathematics.

These competencies are listed below.

Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens and speaks

A. Reading - locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules

B. Writing - not applicable to Pre-Technical Mathematics

C. Arithmetic/Mathematics - performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques

D. Listening - receives, attends to, interprets, and responds to verbal messages and other cues

E. Speaking - not applicable to Pre-Technical Mathematics

Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons

A. Creative Thinking - generates new ideas

B. Decision Making - specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative

C. Problem Solving - recognizes problems and devises and implements plan of action

D. Seeing Things in the Mind's Eye - organizes, and processes symbols, pictures, graphs, objects, and other information

E. Knowing How-to-Learn - uses efficient learning techniques to acquire and apply new knowledge and skills

F. Reasoning - discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem

Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty

A. Responsibility - exerts a high level of effort and perseveres toward goal attainment

B. Self-Esteem - believes in own self-worth and maintains a positive view of self

C. Sociability - demonstrates understanding, friendliness, adaptability, empathy, and politeness in group settings

D. Self-Management - assesses self accurately, sets personal goals, monitors progress, and exhibits self-control

E. Integrity/Honesty - chooses ethical courses of action

Texas State
Technical College
Waco/Marshall

COURSE SYLLABUS

Occupational Mathematics
Title

MTH 115
Number

Math Placement test
Prerequisite

Greg McDaniel
Prepared by

Approved by

6-9-94
Date

This Syllabus has been reviewed and is current on date indicated.

Reviewed by	Date

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Texas State
Technical College
East Texas Center at Marshall

Course Syllabus

I. COURSE DESCRIPTION (catalog description)

DEPARTMENT: Pre-Technical Studies

COURSE: MTH 115 Occupational Mathematics (3-2-4)
This course includes basic English and Metric units of measurements, geometric principles, solutions of basic algebraic equations, and solution of right triangles. Problems from specific occupational areas will be stressed.

PREREQUISITE: Placement as determined by the MATH placement test.

II. COURSE GOALS AND OBJECTIVES:

Goal 1: Use measurements in a program-specific area.

Obj. 1a: Make measurement conversions.

Sub-obj. 1a(1): Convert measurements of time, length, weight, capacity, area, and volume.
Sub-obj. 1a(2): Change English to metric units.
Sub-obj. 1a(3): Change metric to English units.

Goal 2: Perform operations and applications with signed numbers.

Obj. 2a: Add and subtract signed numbers.

Sub-obj. 2a(1): Add signed numbers.
Sub-obj. 2a(2): Subtract signed numbers.

Obj. 2b: Multiply and divide signed numbers.

Sub-obj. 2b(1): Multiply signed numbers.
Sub-obj. 2b(2): Divide signed numbers.

Goal 3: Solve problems involving exponents.

Obj. 3a: Perform operations with exponents.

Sub-obj. 3a(1): Perform operations with exponents.
Sub-obj. 3a(2): Follow the order of operations with exponents.

Goal 4: Perform the four basic operations with algebraic expressions.

Obj. 4a: Add and subtract algebraic expressions.

Sub-obj. 4a(1): Add algebraic expressions.
Sub-obj. 4a(2): Subtract algebraic expressions.

Obj. 4b: Multiply and divide algebraic expressions.

Sub-obj. 4b(1): Multiply algebraic expressions.
Sub-obj. 4b(2): Divide algebraic expressions.

Goal 5: Solve equations and formulas.

Obj. 5a: Solve equations.

Sub-obj. 5a(1): Define equivalent equations.
Sub-obj. 5a(2): Solve linear equations.

Obj. 5b: Solve formulas.

Sub-obj. 5b(1): Evaluate formulas.
Sub-obj. 5b(2): Solve a formula for an indicated variable.

Goal 6: Demonstrate the understanding of ratio and proportion.

Obj. 6a: Solve problems with ratio and proportion.

Sub-obj. 6a(1): Define ratio.
Sub-obj. 6a(2): Define proportion.
Sub-obj. 6a(3): Solve proportions.
Sub-obj. 6a(4): Distinguish between direct and inverse proportions.

Goal 7: Use concepts of geometry.

Obj. 7a: Apply angle facts.

Sub-obj. 7a(1): Label angles.
Sub-obj. 7a(2): Measure angles.
Sub-obj. 7a(3): Classify angles by their measures.
Sub-obj. 7a(4): Apply angle facts.

Obj. 7b: Solve problems involving polygons.

Sub-obj. 7b(1): Define polygon.
Sub-obj. 7b(2): Compute the perimeter of a polygon.
Sub-obj. 7b(3): Compute the area of a polygon.
Sub-obj. 7b(4): Use the Pythagorean theorem.

Obj. 7c: Solve problems involving circles and volume.

Sub-obj. 7c(1): Compute the circumference of a circle.
Sub-obj. 7c(2): Identify the parts of a circle.
Sub-obj. 7c(3): Compute the area of a circle.
Sub-obj. 7c(4): Compute the volume of a prism or pyramid.
Sub-obj. 7c(5): Compute the volume of a cylinder, cone, or sphere.

Goal 8: Solve problems involving basic trigonometry.

Obj. 8a: Solve right triangles using basic trigonometry.

Obj. 8a(1): Define the sine, cosine, and tangent ratios.
Obj. 8a(2): Solve right triangles using the basic trigonometric functions.

III. COURSE OUTLINE

Lecture/Lab

Students enrolled in Math 115 are scheduled in class for a period of 3 lecture hours per week and 2 lab hours per week.

Pre-Technical Studies is a self-paced, individualized program. For each course, students are given a diagnostic pre-test, a set of assignments over objectives they have not yet mastered (based on the diagnostic pre-test), and a comprehensive course mastery test.

In addition to scheduled lectures, one-on-one time with the instructor (based on the individual student's need) is considered to be part of the 3 hours of lecture per week.

CONTENT:

The content of the course is contained on the following pages.

Math 115

Assignment Completion Record

Unit 5 (IMM) Measurement

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zimm1155 ***

Computer: Skills Bank II

Grade — Date Completed

Computer: Skills Bank II (optional)
Word Problems:
Lesson 12 Finding a Percent Using Proportions ______ ______

4-3 Applications of Percent Calculations, pp. 152-166
Exercises 4-3
1-6, 17, 34...................... ______ ______

JSEP Lessons:
5c Read a Color Band Gauge............ ______ ______
1c Order Numbers in Specific Sequence.. ______ ______
2a Interpret the Markings on Linear Scales ______ ______

5d Read and Interpret Scales with Positive and Negative Markings ______ ______

5h Read a Moving Gauge................ ______ ______

5-2 Units and Unit Conversion, pp. 187-197
Book: Exercise 5-2
A.,B. All odds
C. 3,8,9..................... ______ ______

JSEP Lessons:
5e Read and Interpret Multi-Scale Gauges ______ ______

5a Read and Interpret Gauges........... ______ ______
5f Match a Gauge Reading to a Specification ______ ______

5i Adjust Gauges to Meet Specifications ______ ______

5-3 Metric Units, pp. 197-213
Book: Exercise 5-3
A.,B.,C. All evens
D. 1,4,5,11.................. ______ ______

Unit 5 Turn in exercises and ask for Test 5.
Unit 5 Exercises ______ ______

MTH 115

Assignment Completion Record

Unit 6 (IMM) Pre - Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Grade Date Completed

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 12 Integers: Addition and Subtraction
______ ____________

6-1 Addition of Signed Numbers, pp. 241-249
Book: Exercise 6-1
A. - D. All evens
E. 2,3,4,5..................______ ____________

6-2 Subtraction of Signed Numbers, pp. 249-253
Book: Exercise 6-2
A. All odds
B. 1,2,3,4,6,8..............______ ____________

Computer: Skills Bank II (optional).
Geometry and Algebra:
Lesson 13 Integers: Multiplication and Division
______ ____________

6-3 Multiplication and Division of Signed Numbers, pp. 254-258
Book: Exercise 6-3
A., B. All evens
C. all problems.............______ ____________

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 14 Exponents and Square Roots...______ ____________

6-4 Exponents and Square Roots, pp. 258-265
Book: Exercise 6-4
A., B. All odds
C. 1,2,3,6..................______ ____________

Unit 6 Turn in exercises and ask for Test 6.
Unit 6 Exercises........______ ____________

MTH 115

Assignment Completion Record

Unit 7 (IMM) Basic Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Grade   Date Completed

Skills Bank II (optional)
Geometry and Algebra:
Lesson 17 Simplifying Expressions......_____ ___________

7-1 Algebraic Language and Formulas, pp. 275-284
Book: Exercise 7-1
A., B. All evens
C. 1,4,7,10,13,16,19,22......_____ ___________

7-2 Adding and Subtracting Algebraic Expressions, pp. 284-290
Book: Exercise 7-2
A., B. All odds.............._____ ___________

Skills Bank II (optional)
Math Concepts:
Lesson 13 Missing Numbers in Equations._____ ___________

7-3 Solving Equations and Formulas, pp. 290- 310
Book: Exercise 7-3
A., B. All evens
C. 1,4,7,10,13,15............_____ ___________

Turn in Exercises 7-1 - 7-3 and ask for Test 7-1 - 7-3.

Skills Bank II (optional)
Word Problems:
Lesson 8 Needed Operations.............._____ ___________
Lesson 9 Needed Information............_____ ___________

7-4 Solving Word Problems, pp. 311-320
Book: Exercise 7-4
A. 1,4,7,10
B. 1,4,7,10,13,16............_____ ___________

Skills Bank II (optional)
Math Computation:
Lesson 19 Ratio and Percent............_____ ___________

7-5 Ratio and Proportion, pp. 320-341
Book: Exercise 7-5
A. 1,3

B. All odds
C. 1,4
D. 1,4,7,10,13,16
E. 1,2........................_____ ___________

7-6 Multiplying and Dividing Algebraic Expressions, pp. 341-346
Book: Exercise 7-6
A., B. All evens..............._____ ___________

Unit 7 Turn in **exercises** 7-4 - 7-6 **and ask** for Test 7-4 - 7-6.
Unit 7 **Exercises**........._____ ___________

Math 060

Assignment Completion Record

Unit 8 (IMM) Practical Plane Geometry

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
***   Course: zimm0608   ***

Note - JSEP Lessons for Unit 8 will replace all Exercises for Unit 8. All Unit 8 exercises are optional.

	Grade	Date Completed
JSEP Lessons:		
1c Order Numbers in Specific Sequence..	______	____________
2a Interpret the Markings on Linear Scales	______	____________
3a Use Degrees as Units of Angular Measurement of Temperature	______	____________
9a Identify Angles....................	______	____________
9b Estimate the Size of an Angle not Greater than 180 Degrees	______	____________
11a Identify Shape and Position Terms..	______	____________
7a Identify Points, Lines, Line Segments, and Rays	______	____________
7b Identify Parallel, Intersecting, and Other Lines	______	____________
7c Identify Perpendicular and Intersecting Lines	______	____________
8-1 Angle Measurement, pp. 361-372 **(optional)** Book: Exercise 8-1 A., B. All problems..................		____________
JSEP Lessons:		
15c Identify Parts of Geometric Figures	______	____________
8a Identify Geometric Shapes..........	______	____________
8b Identify Characteristics of Plane Shapes	______	____________
15b Match Geometric Figures with Their Names	______	____________
12a Add and Subtract Whole Numbers - No Carrying	______	____________
12b Add and Subtract Whole Numbers - Carrying and Borrowing	______	____________
13a Multiply and Divide Whole Numbers..	______	____________
15f Compute the Area and Perimeter of a Rectangle	______	____________

8-2 Area and Perimeter of Polygons, pp. 372-385 **(optional)**

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Book: Exercise 8-2
A., B. All problems...................__________

JSEP Lessons:
9b Identify Types of Angles...........______ __________
9c Identify Types of Triangles........______ __________

8-3 Triangles, pp. 385-403 (optional)
Exercises 8-3
A. 1,2,4,6,8,9,10,11,13,15
B. 1,3,4,5,6,8,9,10,11,12...................__________

JSEP Lesson:
12c Add and Subtract Decimals..........______ __________
13b Multiply and Divide Decimal Numbers______ __________
15g Compute the Area and the Circumference of a Circle
______ __________

8-4 Circles, pp. 403-414 (optional)
Exercises 8-4
A. All evens.................................__________

Math 060

Assignment Completion Record

Unit 9 (IMM) Solid Figures and Geometric Constructions

Textbook: Mathematics for the Trades

Computer: JSEP
*** Course: zimm1159 ***

Note - JSEP Lessons for Unit 9 will replace the Exercises for Unit 9. Unit 9 Exercises are optional.

JSEP Lessons:
10a Recognize Solid Figure Shapes and Match them to their Names
______ ____________

15h Compute the Area and Volume of Rectangular Solids
______ ____________

9-1 Prisms and Pyramids, pp. 423 - 436 (optional)
Exercises 9-1, pp.433 - 436
A. 1, 2, 4, 6, 7
B. 1, 2, 3........................______ ____________

JSEP Lessons:
11a Identify Shape and Position Terms..______ ____________
9b Identify Characteristics of Plane Shapes
______ ____________

15f Compute the Area and Perimeter of a Rectangle
______ ____________

12a Add and Subtract Whole Numbers - No Carrying
______ ____________

12b Add and Subtract Whole Numbers - Carrying and Borrowing
______ ____________

12c Add and Subtract Decimals.........______ ____________
13a Multiply and Divide Whole Numbers..______ ____________
13b Multiply and Divide Decimal Numbers______ ____________
15g Compute the Area and the Circumference of a Circle
______ ____________

15i Use Formulas to Solve Problems Involving Geometric Figures
______ ____________

9-2 Cylinders, Cones, and Spheres, pp. 436-447 (optional)
Exercises 9-2, pp. 444-446
A. 1-10 All (volume only)
C. 1, 2, 3........................______ ____________

JSEP Lessons:
9d Draw Bisectors of Angles and Altitudes of Triangles
______ ____________

15b Match Geometric Figures with Their Names
______ ____________

15a Draw Plane Geometric Figures.......______ ______________

9-1 Geometric Constructions, pp. 447-461 (optional)
Study the definitions of:
- bisecting a line segment
- bisecting an angle
- perpendicular
- parallel
- tangent.......................................______________

Turn in Units 8 and 9 Exercises and ask for Units 8 and 9 Test.

Assignment Completion Record

MTH 115

Unit 10 Triangle Trigonometry

Date Completed

10-3 Solving Right Triangles, pp. 491-498
A. 4,8,12,16
B. 7,13.................................... ___________

Unit 10 Turn in exercises and ask for Test 10.
Unit 10 exercises.............___________

IV. MATERIALS INVENTORY SHEET

The following materials are required for Math 115:

Textbook:
Mathematics for the Trades, by Carman and Saunders, Prentice-Hall, Inc., 3rd ed.

Additional Materials:

No. 2 pencils

Loose-leaf notebook paper

An electronic calculator

V. GRADING/ATTENDANCE POLICY

Course grades are based on quizzes, tests, and attendance. A unit or objective is not considered to be complete unless the student has a grade of 70 or higher on the quiz or test covering the unit or objective.

Class is scheduled for five hours per week. If a student misses 10 or more hours of class, an excessive absence report will be filed on them with student services. If a student is absent for 5 hours or less during the quarter, they will receive an additional 5-point bonus on their course grade.

SCANS

The Three-Part Foundation competencies of SCANS is in the process of being fully integrated in Pre-Technical Mathematics.

These competencies are listed below.

Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens and speaks

A. Reading - locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules

B. Writing - not applicable to Pre-Technical Mathematics

C. Arithmetic/Mathematics - performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques

D. Listening - receives, attends to, interprets, and responds to verbal messages and other cues

E. Speaking - not applicable to Pre-Technical Mathematics

Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons

A. Creative Thinking - generates new ideas

B. Decision Making - specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative

C. Problem Solving - recognizes problems and devises and implements plan of action

D. Seeing Things in the Mind's Eye - organizes, and processes symbols, pictures, graphs, objects, and other information

E. Knowing How-to-Learn - uses efficient learning techniques to acquire and apply new knowledge and skills

F. Reasoning - discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem

Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty

A. Responsibility - exerts a high level of effort and perseveres toward goal attainment

B. Self-Esteem - believes in own self-worth and maintains a positive view of self

C. Sociability - demonstrates understanding, friendliness, adaptability, empathy, and politeness in group settings

D. Self-Management - assesses self accurately, sets personal goals, monitors progress, and exhibits self-control

E. Integrity/Honesty - chooses ethical courses of action

TASP OBJECTIVES/SKILLS

MATHEMATICS

OBJECTIVE 1. Use number concepts and computational skills
Skill: 1. Operations with fractions
- mixed numbers, reducing (simplifying)
- adding , subtracting
- multiplying, dividing

2. Operations with decimals
- meaning of
- changing fractions to decimals
- adding and subtracting
- multiplying and dividing

3. Operations with integers (the counting numbers, positive and negative)
- rules for operations with signed numbers

4. Exponents/ Scientific Notation
5. Order of operations
(Pretty Please My Dear Aunt Sally)
6. Percents
7. Estimating
8. Less than, greater than (comparing fractions)

OBJECTIVE 2. Word problems involving integers, fractions, decimals, percents ratios and proportions.

OBJECTIVE 3. Interpret information from a graph, table, or chart

OBJECTIVE 4. Graph numbers or number relationships
Skill 1. One variable graphing
2. Two variable graphing
- finding coordinates of a point
- graphing $3x + 2y = 6$
- graphing intercept points
- horizontal and vertical lines
- graphing $2x - y \leq 5$
- graphing $x + 3y < 6$

3. Slopes and intercepts of lines
4. Direct and inverse variation

OBJECTIVE 5. Solve one- and two-variable equations
Skill 1. One-variable equations
- $2x - 3 = 7$
- $3x - 4 = -8x + 5$
- $2(x-3) +2 = 4x$
- $-3/5\ x + 2 = 5$

2. Two-variable equations
- $3x + 2y = 6$, for x
- $5/2\ x - 2/3\ y = 4$, for y

~~5/2 x - 2/3 y = 4, for y~~

3. Solving a system of linear equations
    - solving a system of equations
    - eliminating y to solve a system
    - inconsistent system of equations
    - dependent system of equations

OBJECTIVE 6. Word problems involving one and two variables
- guidelines for solving word problems
- word problems using one or two variables
- coin word problems
- interest word problems
- distance word problems
- distance/time word problems
- solving word problems using a picture

OBJECTIVE 7 Understand operations with algebraic expressions

Skill 1. Adding and Subtracting polynomials
2. Multiplying polynomials
    - multiplying polynomials
    - the FOIL method
    - applications of FOIL method
    - multiplying polynomials using a vertical arrangement
3. Factoring polynomials
    - finding common monomials factors
    - factoring by the common factor method
    - factoring trinomials by considering possible FOIL combinations
    - possible factors of 6x + 5x - 6
    - factoring 8x - 10 - 3
    - factoring x + 8x + 16
    - factoring differences of two squares
    - sum and difference of two cubes
    - factoring sums and differences of cubes
4. Simplifying or reducing rational expressions
5. Multiplying and dividing rational expressions
6. Adding and subtracting rational expressions

OBJECTIVE 8 Solve problems involving quadratic equations

Skill 1. Graphing quadratic equations
    - preparing to graph equation
    - graphing equation
2. Solving quadratic equations
    - by factoring
    - by using the formula
3. Solving word problems involving quadratics
    - the process
    - age problems
    - geometry problem
4. Identifying algebraic relationships which are represented by quadratics
    - writing equation for word problems

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OBJECTIVE 9. Solve problems involving geometric figures
- Skill 1. Identifying geometric formulas
- 2. Solving problems using two- and three-dimensional geometric figures
  - . a process for solving geometric problems
  - . perimeter, circumference
  - . area
  - . surface area, volume
- 3. Solving right triangle problems using the Pythagorean theorem

OBJECTIVE 10. Apply reasoning skills
- Skill 1. Basic definitions, terms, and assumptions
- 2. Drawing conclusions using the principles of similarity, congruence, parallelism,and perpendicularity.
  - . Proportions used with similar triangles
  - . Solving problem of similar triangles
  - . Solving isosceles triangle problem
- 3. Using inductive and deductive reasoning
  - . deductive and inductive reasoning
  - . patterns in number sequences.
  - . looking for patterns

MATHEMATICS

________ Obj.1.1 Fractions
________ Obj.1.2 Decimals
________ Obj.1.3 Signed numbers
________ Obj.1.4 Exponents, Scientific Notation
________ Obj.1.5 Order of Operations
________ Obj.1.6 Percents
________ Obj.1.7 Estimating

________ Obj.2. Word Problems, includes above plus ratio/prop.
________ Obj.3. Interpret graph, table, or chart

________ Obj.4.1 One variable graphing
________ Obj.4.2 Two variable graphing
________ Obj 4.3 Slopes and intercepts of lines
________ Obj.4.4 Direct and inverse variation

________ Obj.5.1 One variable equations
________ Obj.5.2.Two variable equations
________ Obj.5.3 Systems of linear equations

________ Obj.6. Word problems, one and two variables
________ Obj.7.1 + and - polynomials
________ Obj.7.2 x polynomials
________ Obj.7.3 Factoring polynomials
________ Obj.7.4 Simplifying rational ezpressions
________ Obj.7.5 x and / rational expressions
________ Obj.7.6 + and - rational ezpressions

TASP Math continued...

_______ Obj.8.1 Graphing quadratic equations

_______ Obj.8.2 Solving qusdratic equations

_______ Obj.8,3 quadratic word problema

_______ Obj.8.4 Ident. Alg. relationships--quadratics

_______ Obj.9.1 Ident Geometric formulas

_______ Obj.9.2 Solve two- and three-demential geom. figures

_______ Obj.9.3 Right Triangle problems--Pythagorean Theorem

Obj.10. Reasoning skills
_______ Obj.10.1 Basic definitions, terms, assumptions

_______ Obj.10.2 Draw conclutions re similarity, congruence etc.

_______ Obj.10.3 Inductive, deductive reasoning

TASP PREP

MATHEMATICS

________ Obj.1.1 Fractions

________ Obj.1.2 Decimals

________ Obj.1.3 Signed numbers

________ Obj.1.4 Exponents, Scientific Notation

________ Obj.1.5 Order of Operations

________ Obj.1.6 Percents

________ Obj.1.7 Estimating

________ Obj.2. Word Problems, includes above plus ratio/prop.

________ Obj.3. Interpret graph, table, or chart

________ Obj.4.1 One variable graphing

________ Obj.4.2 Two variable graphing

________ Obj 4.3 Slopes and intercepts of lines

________ Obj.4.4 Direct and inverse variation

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________ Obj.5.2.Two variable equations

________ Obj.5.3 Systems of linear equations

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________ Obj.7.1 + and - polynomials

________ Obj.7.2 x polynomials

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________ Obj.7.5 x and / rational expressions

________ Obj.7.6 + and - rational ezpressions

TASP Math continued...

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________ Obj.9.2 Solve two- and three-demential geom. figures

________ Obj.9.3 Right Triangle problems--Pythagorean Theorem

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________ Obj.10.1 Basic definitions, terms, assumptions

________ Obj.10.2 Draw conclutions re similarity, congruence etc.

________ Obj.10.3 Inductive, deductive reasoning

IASP OBJ. SK	topic	Basic Skills BK	WW# Math BK	Math for Trades BK	NP3 Alg BK	WW# ALG BK	NP4 GEOM BK	SKILLS BANK computer	Bri.. ALG computer	Meue ALG computer
1.1	fractions	F 1-5	U. 2+3	Ch 2				MC 10 WP 24 Comp 9-18		
1.2	decimals	D 1-5	U 4	Ch 3				WP 24 Comp 9-8		
1.3	signed numbers			pg. 123-124	U 1	U 2		GA 14,16	1.1.1.1-3	—
1.4	exponents/Sci Nota		PSTC 76	Ch 6, 298-302		U 2, 28-34	54-55	GA 15	1.1.2.2	
1.5	order of operations			39-42 Ch 8-119, 251						
1.6	Percents	P 1-3	U 5	Ch 4				Comp 19 WP 10,12,17		
1.7	estimating			7-10 149				Comp 5		
1.8	less than/greater th					U6, 118			1.2.1.1-3	
2.	Word Problems	•	•	•	•	•	•	WP 1-26		
3	Graph·table·chart			419-446 Ch 9						
4.1	one variable graphing			Ch 9	* U5	U5		GA 8.9	1.1.3.3	4
4.2	two variable graphing					114-115			2.2.3.3	4
4.3	slope & intercept				* 92-93				2.2.3.1	4
4.4	direct & inverse variation		packet - see instructor							
5.1	one variable equations			254-266	44-47	U 3 48-68			1.1.2.1-3 1.1.3.1-2	1
5.2	two variable equations			504	70-74	U4, 70-74			↓	2
5.3	systems of linear equation			505-515		100-110			1.1.3.1-3 2.1.2.1-3	5
6	word problems: variables				U1, 4, 6	Unit 3-7		WP 14 WP 16	2.2.5.1-3	
7.1	add/subtr. polynomials			510-	104-109	78-80			1.2.3.1-2	
7.2	multiply polynomials				115-119	FOIL 115 82-83			1.2.3.3	3

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TASP	T. .P topic	Basic Skills BK	WWH MATH BK	MATH for TRADES BK	3 ALG BK	WWH ALG BK	NP 4 GEOM BK	SKILLS BANK computer	Britanica ALG computer	[illegible] ALG computer
						82-85 87-91			1.2.2+3 2.1.3.1+3	3
1.5	X ÷ rational expressions					77, 80			2.1.3.1-3	—
1.6	+ − rational expressions								2.1.3.3	—
8.1	graph. quadratic equations			525-28		154-5 155-9			2.1.1.3 2.1.2+3	7
8.2	solving quadratic equations			529		156, 160-62			2.2.5.1-3	7
8.3	solving word prob w/ " " quad. equa					156, 160-62			2.2.5.1-3	
8.4	identifying relationship			312-22 324-28			whole Book 82	GA 4-7		
9.1	ident. geometric formulas			322-323 3-29			80-113 118-138			
9.2	solving 2+3 dimential geo. fig			338-340						
9.3	rt. triangle/Pythagorean theo			u-7						
10.1	Reasoning. basic terms etc		✓✓	✓		✓✓			✓	
10.2	drawing conclusions		✓✓	✓		✓✓			✓	
10.3	inductive/deductive reasoning		□	327-9						
			▱	330						
			△	345			18, 19 20-23			
			○	354, 359						
			▯	387						

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Texas State
Technical College
Waco/Marshall

COURSE SYLLABUS

Math TASP Review
Title

MATH 090
Number

Prerequisite

Greg McDaniel
Prepared by

Approved by

6-9-94
Date

This Syllabus has been reviewed and is current on date indicated.

Reviewed by	Date

Texas State
Technical College
East Texas Center at Marshall

Course Syllabus

I. COURSE DESCRIPTION (catalog description)

DEPARTMENT: Pre-Technical Studies

COURSE: Math 090 Math TASP Review (0-2-1)

An intensive review of mathematics for students who have not passed the math portion of the TASP. Instruction is focused on individual needs, employing computer software and videotape study guides. Instruction is presented through lecture and experience in the developmental and/or math labs.

II. COURSE OBJECTIVES:

1. Mathematics fundamentals

2. Solve word problems involving integers, fractions, decimals, and units of measurement

3. Solve problems involving data interpretation and analysis

4. Graph numbers or number relationships

5. Solve one- and two-variable equations

6. Solve word problems involving one and two variables

7. Understand operations with algebraic expressions and functional notation

8. Solve problems involving quadratic equations

9. Solve problems involving geometric figures

10. Solve problems involving geometric concepts

11. Apply reasoning skills

12. Solve problems involving a combination of mathematical skills

III. COURSE OUTLINE

Lecture/Lab

Students enrolled in Math 090 are scheduled in class for a period of 2 lab hours per week.

Pre-Technical Studies is a self-paced, individualized program. For each course, students are given a diagnostic pre-test, a set of assignments over objectives they have not yet mastered (based on the diagnostic pre-test), and a comprehensive course mastery test.

CONTENT:

The content of the course is contained on the following page.

Math 090
TASP Remediation

Textbook: The Official TASP Test Study Guide

Computer: JSEP

Assignment Completion Record and
Course Progress Record

The student will:

Instructor's Initials

1. Take the Practice Test ___________

2. Work through the designated chapters:

Ch. 10 Mathematics Fundamentals ___________
Ch. 11 Solve Word Problems Involving Integers, Fractions, Decimals, and Units of Measurement ___________
Ch. 12 Solve Problems Involving Data Interpretation and Analysis ___________
Ch. 13 Graph Numbers or Number Relationships ___________
Ch. 14 Solve One- and Two-Variable Equations ___________
Ch. 15 Solve Word Problems Involving One or Two Variables ___________
Ch. 16 Understand Operations with Algebraic Expressions and Functional Notation ___________
Ch. 17 Solve Problems Involving Quadratic Equations _______
Ch. 18 Solve Problems Involving Geometric Figures _______
Ch. 19 Solve Problems Involving Geometric Concepts _________
Ch. 20 Apply Reasoning Skills ___________
Ch. 21 Solve Problems Involving a Combination of Mathematical Skills ___________

* Note - Each chapter will consist of a Practice Test and Diagnostic Review.

3. Retake the Practice Test ___________

* Note - The student's grade will be based upon attendance and effort.

IV. MATERIALS INVENTORY SHEET

The following materials are required for Math 090:

Textbook:
The Official TASP Test Study Guide, 1993 ed., National Evaluation Systems, Incorporated.

Additional Materials:

No. 2 pencils

Loose-leaf notebook paper

V. GRADING/ATTENDANCE POLICY

Course grades are based on quizzes, tests, and attendance. A unit or objective is not considered to be complete unless the student has a grade of 70 or higher on the quiz or test covering the unit or objective.

Class is scheduled for two hours per week. If a student misses 4 or more hours of class, an excessive absence report will be filed on them with student services. If a student is absent for 2 hours or less during the quarter, they will receive an additional 5-point bonus on their course grade.

SCANS

The Three-Part Foundation competencies of SCANS is in the process of being fully integrated in Pre-Technical Mathematics.

These competencies are listed below.

Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens and speaks

A. Reading - locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules

B. Writing - not applicable to Pre-Technical Mathematics

C. Arithmetic/Mathematics - performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques

D. Listening - receives, attends to, interprets, and responds to verbal messages and other cues

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B. Decision Making - specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative

C. Problem Solving - recognizes problems and devises and implements plan of action

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D. Self-Management - assesses self accurately, sets personal goals, monitors progress, and exhibits self-control

E. Integrity/Honesty - chooses ethical courses of action

Texas State
Technical College
Waco/Marshall

COURSE SYLLABUS

Introductory Algebra
Title

MATH 101
Number

Placement Test - Math
Prerequisite

Greg McDaniel
Prepared by

Approved by

6-9-94
Date

This Syllabus has been reviewed and is current on date indicated.

Reviewed by	Date

Texas State
Technical College
East Texas Center at Marshall

Course Syllabus

I. COURSE DESCRIPTION (catalog description)

DEPARTMENT: Pre-Technical Studies

COURSE: Math 101 Introductory Algebra (2-3-3)
An introductory algebra course covering operations involving real numbers, polynomials and rational expressions, solutions of linear equations and formulas, and factoring.

PREREQUISITE: Placement determined by MATH placement test. (Developmental/No college credit granted)

II. COURSE GOALS AND OBJECTIVES:

Goal 1: Perform operations with signed numbers.

Obj. 1a: Perform operations with signed numbers.

Sub-obj. 1a(1): Add signed numbers.
Sub-obj. 1a(2): Subtract signed numbers.
Sub-obj. 1a(3): Multiply signed numbers.
Sub-obj. 1a(4): Divide signed numbers.

Goal 2: Perform operations with exponents.

Obj. 2a: Perform operations with exponents.

Sub-obj. 2a(1): Perform operations with exponents.
Sub-obj. 2a(2): Follow the order of operations with exponents.

Goal 3: Perform the four basic operations with algebraic expressions.

Obj. 3a: Perform the four basic operations with algebraic expressions.

Sub-obj. 3a(1): Add and subtract algebraic expressions.
Sub-obj. 3a(2): Multiply and divide algebraic expressions.

Goal 4: Solve problems involving equations and formulas.

Obj. 4a: Solve problems involving equations and formulas.

Sub-obj. 4a(1): Evaluate formulas.
Sub-obj. 4a(2): Solve linear equations.
Sub-obj. 4a(3): Solve a formula for an indicated variable.

Goal 5: Perform operations involving factoring.

Obj. 5a: Demonstrate the understanding of the basic concepts of factoring.

Sub-obj. 5a(1): Define factor.
Sub-obj. 5a(2): Find the factors of a whole number.

III. COURSE OUTLINE

Lecture/Lab

Students enrolled in Math 101 are scheduled in class for a period of 2 lecture hours per week and 3 lab hours per week.

Pre-Technical Studies is a self-paced, individualized program. For each course, students are given a diagnostic pre-test, a set of assignments over objectives they have not yet mastered (based on the diagnostic pre-test), and a comprehensive course mastery test.

In addition to scheduled lectures, one-on-one time with the instructor (based on the individual student's need) is considered to be part of the 2 hours of lecture per week.

CONTENT:

The content of the course is contained on the following pages.

Math 060, 070, or 101

Assignemnt Completion Record

Unit 6 (CHT) Pre - Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zcht0606 ***

Computer: Mathematics / Special Topics
Powers and Roots

Grade Date Completed

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying _____ _____________

12b Add and Subtract Whole Numbers - Carrying and Borrowing _____ _____________

12d Add and Subtract Positive and Negative Numbers _____ _____________

6-1 Addition of Signed Numbers, pp. 241-249
Book: Exercise 6-1
A. - D. All evens
E. 2,3,4,5.................. _____ _____________

6-2 Subtraction of Signed Numbers, pp. 249-253
Book: Exercise 6-2
A. All odds
B. 1,2,3,4,6,8.............. _____ _____________

JSEP Lessons:
13a Multiply and Divide Whole Numbers.. _____ _____________
13d Multiply and Divide Negative and Positive Numbers _____ _____________

6-3 Multiplication and Division of Signed Numbers, pp. 254-258
Book: Exercise 6-3
A., B. All evens
C. all problems.............. _____ _____________

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 14 Exponents and Square Roots... _____ _____________

6-4 Exponents and Square Roots, pp. 258-265
Book: Exercise 6-4
A., B. All odds
C. 1,2,3,6.................. _____ _____________
Unit 6 Turn in exercises and ask for Test 6.
Unit 6 Exercises......... _____ _____________

_____ __________

7-5 Ratio and Proportion, pp. 320-341
Book: Exercise 7-5
A. 1,3
B. All odds
C. 1,4
D. 1,4,7,10,13,16
E. 1,2...................... _____ __________

7-6 Multiplying and Dividing Algebraic Expressions, pp. 341-346
Book: Exercise 7-6
A., B. All evens............ _____ __________

Computer: Skills Bank II
Geometry and Algebra:
Lesson 15 Scientific Notation.......... _____ __________

7-7 Scientific Notation, pp. 346-352
Book: Exercise 7-7
A.,B.,C.,D. All odds.................. __________

Unit 7 Turn in exercises and ask for Test 7.
Unit 7 Exercises......... _____ __________

Math 060, 070, or 101

Assignemnt Completion Record

Unit 6 (INT) Pre - Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Grade Date Completed

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 12 Integers: Addition and Subtraction
_____ __________

6-1 Addition of Signed Numbers, pp. 241-249
Book: Exercise 6-1
A. - D. All evens
E. 2,3,4,5..................._____ __________

6-2 Subtraction of Signed Numbers, pp. 249-253
Book: Exercise 6-2
A. All odds
B. 1,2,3,4,6,8..............._____ __________

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 13 Integers: Multiplication and Division
_____ __________

6-3 Multiplication and Division of Signed Numbers, pp. 254-258
Book: Exercise 6-3
A., B. All evens
C. all problems..............._____ __________

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 14 Exponents and Square Roots..._____ __________

6-4 Exponents and Square Roots, pp. 258-265
Book: Exercise 6-4
A., B. All odds
C. 1,2,3,6..................._____ __________

Unit 6 Turn in exercises and ask for Test 6.
Unit 6 Exercises........._____ __________

Math 060, 070, or 101

Assignment Completion Record

Unit 7 (INT) Basic Algebra

Textbook: **Mathematics for the Trades, 3rd ed.**

Computer: **Skills Bank II**

Grade   Date Completed

Skills Bank II (optional)
Geometry and Algebra:
Lesson 17 Simplifying Expressions......______   ____________

7-1 Algebraic Language and Formulas, pp. 275-284
     Book: Exercise 7-1
          A., B. All evens
          C. 1,4,7,10,13,16,19,22......______   ____________

7-2 Adding and Subtracting Algebraic Expressions, pp. 284-290
     Book: Exercise 7-2
          A., B. All odds.............______   ____________

Skills Bank II (optional)
Math Concepts:
Lesson 13 Missing Numbers in Equations.______   ____________

7-3 Solving Equations and Formulas, pp. 290- 310
     Book: Exercise 7-3
          A., B. All evens
          C. 1,4,7,10,13,15...........______   ____________

Skills Bank II (optional)
Word Problems:
Lesson 8 Needed Operations.............______   ____________
Lesson 9 Needed Information............______   ____________

7-4 Solving Word Problems, pp. 311-320
     Book: Exercise 7-4
          A. 1,4,7,10
          B. 1,4,7,10,13,16...........______   ____________

Turn in Exercises 7-1 - 7-4 and ask for Test 7-1 - 7-4.

Skills Bank II (optional)
Math Computation:
Lesson 19 Ratio and Percent............______   ____________

7-5 Ratio and Proportion, pp. 320-341
     Book: Exercise 7-5
          A. 1,3

B. All odds
C. 1,4
D. 1,4,7,10,13,16
E. 1,2........................_____ __________

7-6 Multiplying and Dividing Algebraic Expressions, pp. 341-346
Book: Exercise 7-6
A., B. All evens.............._____ __________

Computer: Skills Bank II
Geometry and Algebra:
Lesson 15 Scientific Notation.........._____ __________

7-7 Scientific Notation, pp. 346-352
Book: Exercise 7-7
A.,B.,C.,D. All odds....................__________

Turn in exercises 7-5 - 7-7 and ask for Test 7-5 - 7-7.
Unit 7 Exercises........._____ __________

Math 060, 070, or 101

Assignemnt Completion Record

Unit 6 (MET) Pre - Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Grade   Date Completed

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 12 Integers: Addition and Subtraction
_____   __________

6-1 Addition of Signed Numbers, pp. 241-249
Book: Exercise 6-1
A. - D. All evens
E. 2,3,4,5..................._____   __________

6-2 Subtraction of Signed Numbers, pp. 249-253
Book: Exercise 6-2
A. All odds
B. 1,2,3,4,6,8.............._____   __________

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 13 Integers: Multiplication and Division
_____   __________

6-3 Multiplication and Division of Signed Numbers, pp. 254-258
Book: Exercise 6-3
A., B. All evens
C. all problems.............._____   __________

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 14 Exponents and Square Roots..._____   __________

6-4 Exponents and Square Roots, pp. 258-265
Book: Exercise 6-4
A., B. All odds
C. 1,2,3,6..................._____   __________

Unit 6 Turn in exercises and ask for Test 6.
Unit 6 Exercises........._____   __________

Math 060, 070, or 101

Assignemnt Completion Record

Unit 6 (OSH) Pre - Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: JSEP
*** Course: zosh0606 ***

Computer: Skills Bank II

Grade   Date Completed

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 12 Integers: Addition and Subtraction
_____ __________

6-1 Addition of Signed Numbers, pp. 241-249
Book: Exercise 6-1
A. - D. All evens
E. 2,3,4,5.................. _____ __________

6-2 Subtraction of Signed Numbers, pp. 249-253
Book: Exercise 6-2
A. All odds
B. 1,2,3,4,6,8.............. _____ __________

JSEP Lessons:
13a Multiply and Divide Whole Numbers.. _____ __________
13d Multiply and Divide Negative and Positive Numbers
_____ __________

6-3 Multiplication and Division of Signed Numbers, pp. 254-258
Book: Exercise 6-3
A., B. All evens
C. all problems.............. _____ __________

Computer: Skills Bank II (optional)
Geometry and Algebra:
Lesson 14 Exponents and Square Roots... _____ __________

6-4 Exponents and Square Roots, pp. 258-265
Book: Exercise 6-4
A., B. All odds
C. 1,2,3,6.................. _____ __________

Unit 6 Turn in exercises and ask for Test 6.
Unit 6 Exercises......... _____ __________

Math 060, 070, or 101

Assignment Completion Record

Unit 7 (CHT) Basic Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Computer: JSEP
*** Course: zcht0607 ***

Grade Date Completed

Skills Bank II (optional)
Geometry and Algebra:
Lesson 17 Simplifying Expressions......_____ __________

7-1 Algebraic Language and Formulas, pp. 275-284
Book: Exercise 7-1
A., B. All evens
C. 1,4,7,10,13,16,19,22......_____ __________

7-2 Adding and Subtracting Algebraic Expressions, pp. 284-290
Book: Exercise 7-2
A., B. All odds.............._____ __________

Skills Bank II (optional)
Math Concepts:
Lesson 13 Missing Numbers in Equations._____ __________

7-3 Solving Equations and Formulas, pp. 290- 310
Book: Exercise 7-3
A., B. All evens
C. 1,4,7,10,13,15............_____ __________

JSEP Lesson:
16h Use Word Problems..................._____ __________

7-4 Solving Word Problems, pp. 311-320
Book: Exercise 7-4
A. 1,4,7,10
B. 1,4,7,10,13,16............_____ __________

JSEP Lessons:
12a Add and Subtract Whole Numbers - No Carrying
_____ __________
12b Add and Subtract Whole Numbers - Carrying and Borrowing
_____ __________
13a Multiply and Divide Whole Numbers.._____ __________
14b Reduce Fractions to Lowest Terms..._____ __________
14f Multiply and Divide Fractions......_____ __________
16g Solve Problems Involving Ratio and Proportion

Math 060, 070, or 101

Assignment Completion Record

Unit 7 (MET) Basic Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Grade Date Completed

Skills Bank II (optional)
Geometry and Algebra:
Lesson 17 Simplifying Expressions......_____ __________

7-1 Algebraic Language and Formulas, pp. 275-284
Book: Exercise 7-1
A., B. All evens
C. 1,4,7,10,13,16,19,22......_____ __________

7-2 Adding and Subtracting Algebraic Expressions, pp. 284-290
Book: Exercise 7-2
A., B. All odds.............._____ __________

Skills Bank II (optional)
Math Concepts:
Lesson 13 Missing Numbers in Equations._____ __________

7-3 Solving Equations and Formulas, pp. 290- 310
Book: Exercise 7-3
A., B. All evens
C. 1,4,7,10,13,15............_____ __________

Skills Bank II (optional)
Word Problems:
Lesson 8 Needed Operations............._____ __________
Lesson 9 Needed Information..........._____ __________

7-4 Solving Word Problems, pp. 311-320
Book: Exercise 7-4
A. 1,4,7,10
B. 1,4,7,10,13,16............_____ __________

Turn in Exercises 7-1 - 7-4 and ask for Test 7-1 - 7-4.

Skills Bank II (optional)
Math Computation:
Lesson 19 Ratio and Percent............_____ __________

7-5 Ratio and Proportion, pp. 320-341
Book: Exercise 7-5
A. 1,3

B. All odds
C. 1,4
D. 1,4,7,10,13,16
E. 1,2...................... _____ __________

7-6 Multiplying and Dividing Algebraic Expressions, pp. 341-346
Book: Exercise 7-6
A., B. All evens............ _____ __________

Computer: Skills Bank II
Geometry and Algebra:
Lesson 15 Scientific Notation.......... _____ __________

7-7 Scientific Notation, pp. 346-352
Book: Exercise 7-7
A.,B.,C.,D. All odds.................. __________

Turn in exercises 7-5 - 7-7 and ask for Test 7-5 - 7-7.
Unit 7 Exercises......... _____ __________

Math 060, 070, or 101

Assignment Completion Record

Unit 7 (OSH) Basic Algebra

Textbook: Mathematics for the Trades, 3rd ed.

Computer: Skills Bank II

Grade   Date Completed

Skills Bank II (optional)
Geometry and Algebra:
Lesson 17 Simplifying Expressions...... _____ __________

7-1 Algebraic Language and Formulas, pp. 275-284
Book: Exercise 7-1
A., B. All evens
C. 1,4,7,10,13,16,19,22...... _____ __________

7-2 Adding and Subtracting Algebraic Expressions, pp. 284-290
Book: Exercise 7-2
A., B. All odds............. _____ __________

Skills Bank II (optional)
Math Concepts:
Lesson 13 Missing Numbers in Equations. _____ __________

7-3 Solving Equations and Formulas, pp. 290- 310
Book: Exercise 7-3
A., B. All evens
C. 1,4,7,10,13,15............ _____ __________

Skills Bank II (optional)
Word Problems:
Lesson 8 Needed Operations............. _____ __________
Lesson 9 Needed Information............ _____ __________

7-4 Solving Word Problems, pp. 311-320
Book: Exercise 7-4
A. 1,4,7,10
B. 1,4,7,10,13,16............ _____ __________

Turn in Exercises 7-1 - 7-4 and ask for Test 7-1 - 7-4.

Skills Bank II (optional)
Math Computation:
Lesson 19 Ratio and Percent............ _____ __________

7-5 Ratio and Proportion, pp. 320-341
Book: Exercise 7-5
A. 1,3

B. All odds
C. 1,4
D. 1,4,7,10,13,16
E. 1,2...................... ______ ____________

7-6 Multiplying and Dividing Algebraic Expressions, pp. 341-346
Book: Exercise 7-6
A., B. All evens............. ______ ____________

Computer: Skills Bank II
Geometry and Algebra:
Lesson 15 Scientific Notation.......... ______ ____________

7-7 Scientific Notation, pp. 346-352
Book: Exercise 7-7
A.,B.,C.,D. All odds.................. ____________

Turn in exercises 7-5 - 7-7 **and ask for Test** 7-5 - 7-7.
Unit 7 Exercises......... ______ ____________

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 101.1a Perform operations with signed numbers.

Competencies 54-57

IMPORTANCE OF OBJECTIVE

Signed numbers are used to represent positive and negative quantities.

STUDENT WILL

Perform operations with signed numbers.

TO THIS STANDARD

Students will pass Quiz 101.1a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 101.2a Perform operations with exponents.

Competencies 59-60

IMPORTANCE OF OBJECTIVE

Exponents are used when the same number appears many times in a multiplication.

STUDENT WILL

Be able to perform operations with exponents.

TO THIS STANDARD

Students will pass Quiz 101.2a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 101.3a Perform the four basic operations with algebraic expressions.

Competencies 66 and 71

IMPORTANCE OF OBJECTIVE

Manipulating expressions is a useful procedure in algebra.

STUDENT WILL

Be able to add, subtract, multiply, and divide algebraic expressions.

TO THIS STANDARD

Students will pass Quiz 101.3a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 101.4a Solve problems involving equations and formulas.

Competencies 74, 76-77

IMPORTANCE OF OBJECTIVE

Equations are an integral part of algebra.

STUDENT WILL

Be able to solve linear equations and manipulate formulas.

TO THIS STANDARD

Students will pass Quiz 101.4a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 101.5a Demonstrate the understanding of factoring.

Competencies 72-73

IMPORTANCE OF OBJECTIVE

It is sometimes necessary to break an expression into its factors.

STUDENT WILL

Be able to find the factors of a whole number.

TO THIS STANDARD

Students will pass Quiz 101.5a with a score of 70% or better.

IV. MATERIALS INVENTORY SHEET

The following materials are required for Math 101:

Textbook:
Mathematics for the Trades, 3rd ed., Carman and Saunders, Prentice-Hall Publishing Company.

Additional Materials:

No. 2 pencils

Loose-leaf notebook paper

An electronic calculator

V. GRADING/ATTENDANCE POLICY

Course grades are based on quizzes, tests, and attendance. A unit or objective is not considered to be complete unless the student has a grade of 70 or higher on the quiz or test covering the unit or objective.

Class is scheduled for five hours per week. If a student misses 10 or more hours of class, an excessive absence report will be filed on them with student services. If a student is absent for 5 hours or less during the quarter, they will receive an additional 5-point bonus on their course grade.

SCANS

The Three-Part Foundation competencies of SCANS is in the process of being fully integrated in Pre-Technical Mathematics.

These competencies are listed below.

Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens and speaks

A. Reading - locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules

B. Writing - not applicable to Pre-Technical Mathematics

C. Arithmetic/Mathematics - performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques

D. Listening - receives, attends to, interprets, and responds to verbal messages and other cues

E. Speaking - not applicable to Pre-Technical Mathematics

Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons

A. Creative Thinking - generates new ideas

B. Decision Making - specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative

C. Problem Solving - recognizes problems and devises and implements plan of action

D. Seeing Things in the Mind's Eye - organizes, and processes symbols, pictures, graphs, objects, and other information

E. Knowing How-to-Learn - uses efficient learning techniques to acquire and apply new knowledge and skills

F. Reasoning - discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem

Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty

A. Responsibility - exerts a high level of effort and perseveres toward goal attainment

B. Self-Esteem - believes in own self-worth and maintains a positive view of self

C. Sociability - demonstrates understanding, friendliness, adaptability, empathy, and politeness in group settings

D. Self-Management - assesses self accurately, sets personal goals, monitors progress, and exhibits self-control

E. Integrity/Honesty - chooses ethical courses of action

Texas State
Technical College
Waco/Marshall

COURSE SYLLABUS

Intermediate Algebra
Title

MATH 104
Number

Placement Test
Prerequisite

Greg McDaniel
Prepared by

Approved by

6-9-94
Date

This Syllabus has been reviewed and is current on date indicated.

Reviewed by	Date

Texas State
Technical College
East Texas Center at Marshall

Course Syllabus

I. COURSE DESCRIPTION (catalog description)

DEPARTMENT: Pre-Technical Studies

COURSE: Math 104 Intermediate Algebra (4-0-3)
A study of relations and functions, inequalities, polynomials, rational expression and quadratics with an introduction to complex numbers, and determinants.

PREREQUISITE: Math 101, or equivalent as determined by MATH placement test. (Developmental/No college credit granted)

II. COURSE GOALS AND OBJECTIVES:

Goal 1: Demonstrate the understanding of the real number system.

Obj. 1a: Demonstrate the understanding of the real number system.

Sub-obj. 1a(1): Determine whether a number is natural, an integer, rational, or irrational.
Sub-obj. 1a(2): Order real numbers.
Sub-obj. 1a(3): Determine the distance between two real numbers.

Goal 2: Demonstrate the understanding of exponents.

Obj. 2a: Solve problems involving exponents.

Sub-obj. 2a(1): Define exponent.
Sub-obj. 2a(2): Perform operations with exponents.
Sub-obj. 2a(3): Follow the order of operations with exponents.

Goal 3: Demonstrate the understanding of radicals.

Obj. 3a: Solve problems involving radicals.

Sub-obj. 3a(1): Distinguish between the parts of a radical expression.
Sub-obj. 3a(2): Use the properties of radicals.
Sub-obj. 3a(3): Simplify radicals.

Sub-obj. 3a(4): Rationalize numerators and denominators.

Goal 4: Demonstrate the understanding of polynomials.

Obj. 4a: Solve problems involving polynomials.

Sub-obj. 4a(1): Define polynomial.
Sub-obj. 4a(2): Add and subtract polynomials.
Sub-obj. 4a(3): Multiply and divide polynomials.
Sub-obj. 4a(4): Find special products of polynomials.

Goal 5: Factor polynomials.

Obj. 5a: Perform operations involving the factoring of polynomials.

Sub-obj. 5a(1): Factor polynomials with common factors.
Sub-obj. 5a(2): Factor the difference of two squares, perfect square trinomials, and the sum and difference of cubes.
Sub-obj. 5a(3): Factor trinomials with binomial factors.
Sub-obj. 5a(4): Factor by grouping.

Goal 6: Solve problems involving fractional expressions.

Obj. 6a: Perform operations involving fractional expressions.

Sub-obj. 6a(1): Determine the domain of an algebraic expression.
Sub-obj. 6a(2): Simplify rational expressions.
Sub-obj. 6a(3): Add and subtract rational expressions.
Sub-obj. 6a(4): Multiply and divide rational expressions.
Sub-obj. 6a(5): Simplify compound fractions.

Goal 7: Solve problems involving linear equations.

Obj. 7a: Solve problems involving linear equations.

Sub-obj. 7a(1): Solve linear equations.
Sub-obj. 7a(2): Solve equations involving fractions.
Sub-obj. 7a(3): Solve word problems using algebraic models.

Goal 8: Solve quadratic equations.

Obj. 8a: Use various techniques to solve quadratic equations.

Sub-obj. 8a(1): Define quadratic equation.
Sub-obj. 8a(2): Solve quadratic equations by factoring.

Sub-obj. 8a(3): Solve quadratic equations by extracting square roots.

Sub-obj. 8a(4): Solve quadratic equations by completing the square.

Sub-obj. 8a(5): Solve quadratic equations by using the Quadratic Formula.

Goal 9: Demonstrate the understanding of complex numbers.

Obj. 9a: Perform the basic operations with complex numbers.

Sub-obj. 9a(1): Define the imaginary unit i.
Sub-obj. 9a(2): Add and subtract complex numbers.
Sub-obj. 9a(3): Multiply and divide complex numbers.

Goal 10: Demonstrate the understanding of linear inequalities.

Obj. 10a: Solve problems involving linear inequalities.

Sub-obj. 10a(1): Determine the intervals on the real number line for an inequality.

Sub-obj. 10a(2): Solve a linear inequality.

Sub-obj. 10a(3): Solve an inequality involving absolute value.

Goal 11: Solve systems of equations.

Obj. 11a: Use various techniques to solve systems of linear equations.

Sub-obj. 11a(1): Solve systems of linear equations by the method of substitution.

Sub-obj. 11a(2): Solve systems of linear equations by the method of elimination.

Sub-obj. 11a(3): Solve systems of linear inequalities.

Goal 12: Demonstrate the understanding of graphing.

Obj. 12a: Solve problems involving graphing.

Sub-obj. 12a(1): Graph linear equations.
Sub-obj. 12a(2): Graph linear inequalities.
Sub-obj. 12a(3): Graph linear functions.
Sub-obj. 12a(4): Graph quadratic functions.

III. COURSE OUTLINE

Lecture/Lab

Students enrolled in Math 104 are scheduled in class for a period of 4 lecture hours per week.

Pre-Technical Studies is a self-paced, individualized program. For each course, students are given a diagnostic pre-test, a set of assignments over objectives they have not yet mastered (based on the diagnostic pre-test), and a comprehensive course mastery test.

In addition to scheduled lectures, one-on-one time with the instructor (based on the individual student's need) is considered to be part of the 4 hours of lecture per week.

CONTENT:

The content of the course is contained on the following pages.

Math 104

Assignment Completion Record

Unit 1 Expressions and Formulas

Textbook: Working with Numbers, Algebra

Computer: Skills Bank II

	Grade	Date Completed
Computer: Skills Bank II Geometry and Algebra: Lesson 17 Simplifying Expressions......		
Exercises		
What is Algebra?, p.4, 1c-d, 2, 3.......		
Writing Expressions, p.5, 1, 3b, 4, 5, 6		
Evaluating Expressions, p.6, 1, 3c-d, 4, 5, 6		
Evaluating Expressions with Variables, p.7, 1, 3d, 4-7		
Solutions to Equations, p.8, 1, 4b, 5-7.		
Missing Addends and Missing Factors, p.9, 1, 3c-d, 4-6		
Write a Number Sentence, p.10-11, 1, 5-12		
The Area Formula, p.12, 1, 4-8..........		
Missing Factors in the Area Formula, p.13, 1, 2c, 3		
The Volume Formula, p.14, 1, 3-6........		
Missing Factors in the Volume Formula, p.15, 1, 2c, 3		
The Simple Interest Formula, p.16, 1, 3, 4		
Missing Factors in the Simple Interest Formula, p.17, 1, 2c, 3		
The Distance Formula, p.18, 1, 3-6......		

Missing Factors in the Distance Formula, p.19, 1, 4-10 ______ __________

The Circumference Formula, p.20, 1, 3-6.______ __________

The Circle Area Formula, p.21, 1, 2b, 3-4 ______ __________

Volume of a Cylinder Formula, p.22, 1, 3-6 ______ __________

Temperature Formulas, p.23, 1, 4-10.....______ __________

Identify Extra Information, p.24-25, 1, 4-10 ______ __________

Unit 1 Review, p.26-27, 1, 5d, 6-20.....______ __________

Ask for Unit 1 Test.

Math 104

Assignment Completion Record

Unit 2 Integers and Monomials

Textbook: Working with Numbers, Algebra

Computer: Skills Bank II

	Grade	Date Completed
Computer: Skills Bank II Geometry and Algebra: Lesson 12 Integers: Addition and Subtraction		
Lesson 13 Integers: Multiplication and Division		
Exercises		
Integers and Opposites, p.28, 1, 3b-c, 4-6		
Adding Integers with the Same Sign, p.29, 1, 3c, 4-7		
Adding Integers with Different Signs, p.30, 1, 4-8		
Subtracting Integers, p.31, 1, 4-8......		
Multiplying Integers, p.32, 1, 3c-d, 4-6		
Dividing Integers, p.33, 1, 4-8.........		
Choose an Operation, p.34-35, 1, 5-12...		
Terms, Coefficients, and Monomials, p.36, 1, 3-4		
Adding Like Terms, p.37, 1, 4-8.........		
Subtracting Like Terms, p.38, 1, 4-8....		
Simplifying Expressions, p.39, 1, 3c, 4-7		
Multiplying Monomials, p.40, 1, 4b-d, 5-9		
Dividing Monomials by Integers, p.41, 1, 3-7		

Simplifying Expressions with Parentheses, p.42, 1, 3-6 ______ ____________

Simplifying Fractional Expressions, p. 43, 1, 3-5 ______ ____________

Use Estimation, p.44-45, 1, 5-12........______ ____________

Unit 2 Review, p.46, 1, 4-12...........______ ____________

Cumulative Review, p.47, 1, 4-10........______ ____________

Ask for Unit 2 Test.

Math 104

Assignment Completion Record

Unit 3 Solving Equations

Textbook: Working with Numbers, Algebra

Computer: Mathematics: Q-Algebra

	Grade	Date Completed
Computer: Mathematics **Q-Algebra:** 1 - Equations 1		
Exercises:		
Solving Addition Equations, p.48, 1, 3-5		
Solving Subtraction Equations, p.49, 1, 3-4		
Solving Multiplication Equations, p.50, 1, 3-4		
Solving Division Equations, p.51, 1, 3-4		
Practice in Solving Equations, p.52, 1, 4-10		
The Fractional Equation, p.53, 1, 3-4		
Combining Like Terms, p.54, 1, 3-4		
Using Equations to Solve Problems, p.55, 1, 3-6		
More About Using Equations, p.56, 1, 3-6		
Computer: Mathematics **Q-Algebra** 2 - Equations 2		
Solving Two-Step Equations, p.57, 1, 3-4		
Work Backwards, p.58-59, 1, 4-8		
Another Step in Combining Terms, p.60, 1, 3-4		
Clearing Fractions, p.61, 1-3		
Cross Multiplication, p.62, 1, 3-4		

Equations with Parentheses, p.63, 1, 3-5____ ____________

Solving Problems, p.64, 1, 4-10.........____ ____________

Solving Problems, p.65, 1, 4-8..........____ ____________

Identify Substeps, p.66-67, 1, 4-8......____ ____________

Unit 3 Review, p.68, 1, 3-8.............____ ____________

Cumulative Review, p.69, 1, 3-10........____ ____________

Ask for Unit 3 Test.

Math 104

Assignment Completion Record

Unit 4 Exponents and Polynomials

Textbook: Working with Numbers, Algebra

Computer: Skills Bank II

	Grade	Date Completed
Computer: Skills Bank II Geometry and Algebra: Lesson 14: Exponents and Square Roots...		
Exercises:		
Exponents, p.70, 1, 3-9..................		
Powers of Integers, p.71, 1, 4-10.......		
Find a Pattern, p.72-73, 1, 5-12........		
Multiplying Monomials, p.74, 1, 4-8.....		
Powers of Powers, p.75, 1, 3-9..........		
Dividing Monomials, p.76, 1, 3-6........		
More About Dividing Monomials, p.77, 1, 3-6		
Reducing Algebraic Fractions to Lowest Terms, p.78, 1, 3-6		
Adding Binomials, p.79, 1, 4-8..........		
Subtracting Binomials, p.80, 1, 4-8.....		
Simplifying Polynomials with Exponents, p.81, 1, 4-8		
Multiplying Fractions, p.82, 1, 3-6.....		
Dividing Fractions, p.83, 1, 3-7........		
Multiplying Polynomials by Monomials, p.84, 1, 4-8		
Dividing Polynomials by Monomials, p.85, 1, 3-6		
Use Logic, p.86-87, 1, 3-5..............		

Removing Common Monomial Factors, p.88, 1, 3-7 ______ ____________

Multiplying Polynomials by Binomials, p.89, 1, 3-7 ______ ____________

Dividing Polynomials by Binomials, p.90, 1-3 ______ ____________

More Practice Multiplying and Dividing Polynomials, p.91, 1, 3-7 ______ ____________

Unit 4 Review, p.92, 1, 4-9............______ ____________

Cumulative Review, p.93, 1, 4-10........______ ____________

Ask for the Unit 4 Test.

Math 104

Assignment Completion Record

Unit 5 Graphs and Systems of Equations

Textbook: Working with Numbers, Algebra

Computer:Mathematics
Q-Algebra

	Grade	Date Completed
Exercises:		
Equations with Two Variables, p.94, 1-3.		
Graphing Ordered Pairs, p.95, 1-4.......		
Computer: Mathematics **Q-Algebra:** 4 - Graphing Linear Functions..........		
Make a List, p.98-99, 1, 4-8...........		
Systems of Equations, p.100, 1-2.......		
Practice with Systems of Equations, p.101, 1, 3-4		
Computer: Mathematics **Q-Algebra:** 5 - Simultaneous Linear Equations......		
Larger Coefficients, p.102, 1-3........		
Changing the Coefficients, p.103, 1.....		
Practice in Changing Coefficients, p.104, 1-3		
Changing Coefficients in Both Equations, p.105, 1-2		
Solving in Terms of One Variable, p.106, 1, 3-4		
The Substitution Method, p.107, 1-2.....		
Practice with the Substitution Method, p.108, 1-3		
Choose a Method, p.109, 1-3............		

Solving Problems with Systems of Equations, p.110, 1, 3-4
______ ____________

Solving Problems, p.111, 1, 4-8.........______ ____________

Systems of Equations with Fractional Coefficients, p.112, 1-2
______ ____________

Solving Problems, p.113, 1, 3-6.........______ ____________

Use a Graph, p.114-115, 1, 3-6..........______ ____________

Unit 5 Review, p.116, 1-5...............______ ____________

Cumulative Review, p.117, 1, 3-7........______ ____________

Ask for Unit 5 Test.

Math 104

Assignment Completion Record

Unit 7 Factoring and Quadratic Equations

Textbook: Working with Numbers, Algebra

Computer: Mathematics
Q-Algebra

	Grade	Date Completed
Computer: Mathematics **Q-Algebra** 3 - Binomial Multiplication.............		
Exercises:		
The Square of the Sum of Two Terms, p.138, 1, 4-10		
The Square of the Difference of Two Terms, p.139, 1, 4-10		
Computer: Mathematics **Q-Algebra** 6 - Factoring Algebraic Expressions.....		
Factoring: The Square of the Sum of Two Terms, p.140, 1, 5-12		
Factoring: The Square of the Difference of Two Terms, p.141, 1, 5-12		
Computer: Mathematics **Q-Algebra** 7 - Quadratic Equations.................		
Solving Quadratic Equations: Type 1, p.142, 1-3		
Solving Quadratic Equations: Type 2, p.143, 1-3		
The Product of the Sum and the Difference of Two Terms, p.144, 1, 4-9		
The Product of Two Binomials with a Common Term, p.145, 1, 4-9		
Factoring: The Difference of Two Squares, p.146, 1, 4-10		

Factoring for Two Binomials with a Common Term, p.147, 1, 4-8 ______ __________

Solving Quadratic Equations: Type 3, p.148, 1, 3-4 ______ __________

Solving Quadratic Equations: Type 4, p.149, 1, 3-4 ______ __________

The Product of Two Binomials with Like Terms, p.150, 1, 4-9 ______ __________

Factoring for Two Binomials with Like Terms, p.151, 1, 3-6 ______ __________

Use Guess and Check, p.152-153, 1, 5-12.______ __________

Solving Quadratic Equations: Type 5, p.154, 1, 3-4 ______ __________

Solving Quadratic Equations: Mixed Types, p.155, 1, 3-5 ______ __________

Writing and Solving Equations, p.156, 1, 4-10 ______ __________

Completing the Square, p.157, 1, 3-4....______ __________

The Quadratic Formula, p.158, 1-3.......______ __________

More Practice with the Quadratic Formula, p.159, 1-3 ______ __________

Select a Strategy, p.160-161, 1, 4-10...______ __________

Using the Quadratic Formula in Solving Problems, p.162, 1, 3-6 ______ __________

Unit 7 Review, p.163, 1, 3-9...........______ __________

Cumulative Review, p.164, 1, 3-7.......______ __________

Ask for the Unit 7 Test.

Math 070, Math 101, or Math 104

After you have completed all of the units (1-7), you will take a Course Mastery Test.

The Final Review will help you prepare for the Course Mastery Test.

Exercises:

Final Review, p.165-168, 1, 2-8(a,b,d), 9-14, 15-18(a,b,d), 19-22, 23-27(a,c), 28-29, 30-36(a,c), 37-38

Ask for the Course Mastery Test.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 104.1a Demonstrate the understanding of the real number system.

Competencies 100-102

IMPORTANCE OF OBJECTIVE

It is important to understand the forms in which a number can be expressed.

STUDENT WILL

Be able to tell the type of number a quantity is.

TO THIS STANDARD

Students will pass Quiz 104.1a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 104.2a Solve problems involving exponents.

Competencies 58-60

IMPORTANCE OF OBJECTIVE

Exponents are used when we encounter a number which is to be multiplied by itself several times.

STUDENT WILL

Be able to perform operations with exponents.

TO THIS STANDARD

Students will pass Quiz 104.2a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 104.3a Solve problems involving radicals.

Competencies 103-106

IMPORTANCE OF OBJECTIVE

Roots are used in many applications.

STUDENT WILL

Be able to simplify radicals.

TO THIS STANDARD

Students will pass Quiz 104.3a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 104.4a Solve problems involving polynomials.

Competencies 107-110

IMPORTANCE OF OBJECTIVE

Polynomials can be applied to real situations requiring operations with algebraic expressions.

STUDENT WILL

Be able to perform the four basic operations with polynomials.

TO THIS STANDARD

Students will pass Quiz 104.4a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 104.5a Perform operations involving the factoring of polynomials.

Competencies 111-114

IMPORTANCE OF OBJECTIVE

Complicated algebraic expressions can often be expressed in a simplified form through the process of factoring.

STUDENT WILL

Be able to factor polynomials.

TO THIS STANDARD

Students will pass Quiz 104.5a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 104.6a Perform operations involving fractional expressions.

Competencies 115-119

IMPORTANCE OF OBJECTIVE

Algebraic fractions form a basis which enables us to solve many applied problems.

STUDENT WILL

Be able to perform the basic operations with fractional expressions.

TO THIS STANDARD

Students will pass Quiz 104.6a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 104.7a Solve problems involving linear equations.

Competencies 76, 78, and 86

IMPORTANCE OF OBJECTIVE

Solving for unknowns is an essential component of algebra.

STUDENT WILL

Be able to solve linear equations.

TO THIS STANDARD

Students will pass Quiz 104.7a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 104.8a Use various techniques to solve quadratic equations.

Competencies 120-124

IMPORTANCE OF OBJECTIVE

Quadratic equations are used in many applications.

STUDENT WILL

Be able to solve quadratic equations.

TO THIS STANDARD

Students will pass Quiz 104.8a with a score of 80% or better.

Texas State
Technical Colle
East Texas Center at Marsh

2400 East End Blvd., So.
Marshall, Texas 75670

P.O. Box 1269
Marshall, Texas 75671
903/935-1010
Fax: 903/935-9554

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 104.9a Perform the basic operations with complex numbers.

Competencies 125-127

IMPORTANCE OF OBJECTIVE

Complex numbers are used in the development of shapes and in many electrical applications.

STUDENT WILL

Be able to add, subtract, multiply, and divide complex numbers.

TO THIS STANDARD

Students will pass Quiz 104.9a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 104.10a Solve problems involving linear inequalities.

Competencies 128-130

IMPORTANCE OF OBJECTIVE

Inequalities are used in many technical applications.

STUDENT WILL

Be able to solve linear inequalities.

TO THIS STANDARD

Students will pass Quiz 104.10a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 104.11a Use various techniques to solve systems of linear equations.

Competencies 131-133

IMPORTANCE OF OBJECTIVE

Many types of stated problems from a wide variety of fields lead to systems of equations.

STUDENT WILL

Be able to solve systems of linear equations.

TO THIS STANDARD

Students will pass Quiz 104.11a with a score of 70% or better.

TEXAS STATE TECHNICAL COLLEGE

EAST TEXAS CENTER AT MARSHALL

PERFORMANCE STANDARDS

OBJECTIVE: 104.12a Solve problems involving graphing.

Competencies 134-137

IMPORTANCE OF OBJECTIVE

Graphs depict some type of relationship between variabl quantities.

STUDENT WILL

Be able to linear and quadratic functions.

TO THIS STANDARD

Students will pass Quiz 104.12a with a score of 70% or better.

IV. MATERIALS INVENTORY SHEET

The following materials are required for Math 104:

Textbook:
Working with Numbers: Algebra, 1990 ed., Shea, James T., Steck-Vaughn Company.

Additional Materials:

No. 2 pencils

Loose-leaf notebook paper

An electronic calculator

V. GRADING/ATTENDANCE POLICY

Course grades are based on quizzes, tests, and attendance. A unit or objective is not considered to be complete unless the student has a grade of 70 or higher on the quiz or test covering the unit or objective.

Class is scheduled for four hours per week. If a student misses 8 or more hours of class, an excessive absence report will be filed on them with student services. If a student is absent for 5 hours or less during the quarter, they will receive an additional 5-point bonus on their course grade.

SCANS

The Three-Part Foundation competencies of SCANS is in the process of being fully integrated in Pre-Technical Mathematics.

These competencies are listed below.

Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens and speaks

A. Reading - locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules

B. Writing - not applicable to Pre-Technical Mathematics

C. Arithmetic/Mathematics - performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques

D. Listening - receives, attends to, interprets, and responds to verbal messages and other cues

E. Speaking - not applicable to Pre-Technical Mathematics

Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons

A. Creative Thinking - generates new ideas

B. Decision Making - specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative

C. Problem Solving - recognizes problems and devises and implements plan of action

D. Seeing Things in the Mind's Eye - organizes, and processes symbols, pictures, graphs, objects, and other information

E. Knowing How-to-Learn - uses efficient learning techniques to acquire and apply new knowledge and skills

F. Reasoning - discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem

Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty

A. Responsibility - exerts a high level of effort and perseveres toward goal attainment

B. Self-Esteem - believes in own self-worth and maintains a positive view of self

C. Sociability - demonstrates understanding, friendliness, adaptability, empathy, and politeness in group settings

D. Self-Management - assesses self accurately, sets personal goals, monitors progress, and exhibits self-control

E. Integrity/Honesty - chooses ethical courses of action

Communications

STUDENT COMPETENCY PROFILE

NAME ______________________

S.S. # ______________________

COMPETENCY STATEMENT	COURSE	MASTERY		
WRITING	ENGLISH 010/020	Mastery Level	Date	Initials
1. Use all parts of speech effectively in sentences.	010			
2. Identify sentences that convey appropriate subject-verb agreement.	010			
3. Define and differentiate between prepositional and verbal phrases.	010			
4. Correctly use prepositional and verbal phrases.	010			
5. Differentiate between phrases and clauses.	010			
6. Define and differentiate between independent and dependent clauses.	010			
7. Identify sentences that convey coordinate and subordinate ideas appropriately.	010			
8. Use a variety of sentence structures, including simple, compound, complex, and compound-complex.	010			
9. Differentiate between fragments and run-on sentences.	010			
10. Identify sentences that convey appropriate use of pronouns.	010			
11. Correctly use punctuation.	010			
12. Compose unified and complete paragraphs.	010			
13. Refine spelling techniques.	010			
14. Recognize and correct shifts or inconsistencies to attain smoothness and clearness in writing.	020			
15. Choose appropriate words to convey intended meaning.	020			
16. Expand vocabulary usage.	020			

STUDENT COMPETENCY PROFILE (Cont'd)

COMPETENCY STATEMENT	COURSE	MASTERY		
WRITING	ENGLISH 010/020	Mastery Level	Date	Initials
17. Vary word and sentence choice for purpose and audience.	020			
18. Refine sentences and paragraphs into compositions exhibiting unity, clalrity, and coherence.	020			
19. Use the composing process and electronic media to plan and generate writing.	020			
20. Write descriptive, persuasive, narrative, and expository paragraphs of increasing length and complexity.	020			
21. Use electronic media to compose multiple-paragraph compositions.	020			
22. Evaluate and revise content, organization, topic development, appropriate transition, clarity of language, and appropriate word and sentence choice according to the purpose and audience for which the piece is intended.	020			
23. Proofread written work for punctuation, spelling, grammatical and syntactical errors, paragraph indentation, margins, and legibility of writing.	020			
24. Expand paragraphs into common types of reports.	020			
25. Compose business letters and communications.	020			
26. Write multiple-paragraph compositions incorporating outside information with documentation.	020			

COMPETENCY/RESOURCE MATRIX

COMPETENCY STATEMENT	RESOURCES						
WRITING	**BOOK 1**	**BOOK 2**	**COMP. 1**	**COMP. 2**	**COMP. 3**	**COMP. 4**	**COURSE**
1. Use all parts of speech effectively in sentences.	Ch. 1-4, Ch. 7-8	P. 28 42-43 170-176 177-181 182-183	A-M		Gram. Usage 1-19 Lang. Usage 1-12	36f	English 010
2. Identify sentences that convey appropriate subject-verb agreement.	Ch. 4	P. 66 186		C	Gram. Usage 6-7		English 010
3. Define and differentiate between prepositional and verbal phrases.	Ch. 3			D, I-L			English 010
4. Correctly use prepositional and verbal phrases.	Ch. 3			D, I-L	Lang. Usage 11		English 010
5. Differentiate between phrases and clauses.	Ch. 5			E-H			English 010
6. Define and differentiate between independent and dependent clauses.	Ch. 5	P. 10 32-33 44 54-55 105 190-203		E-H	Gram. Usage 3 Sentence Structure 1-9		English 010
7. Identify sentences that convey coordinate and subordinate ideas appropriately.	Ch. 5 Ch. 11-12	(same)		E-H	Sentence Structure 1-9	34 36f-h	English 010 020
8. Use a variety of sentence structures, including simple, compound, complex, and compound-complex.	Ch. 5-9	(same)	C-D	E-H	Sentence Structure 1-9	36f-h	English 010
9. Differentiate between fragments and run-on sentences.	Ch. 7	(same)	C-D		Sentence Structure 7	36f	English 010

COMPETENCY/RESOURCE MATRIX

COMPETENCY STATEMENT	RESOURCES						
WRITING	BOOK 1	BOOK 2	COMP. 1	COMP. 2	COMP. 3	COMP. 4	COURSE
10. Identify sentences that convey appropriate use of pronouns.	Ch. 8	P. 28 170-176	F, G		Gram. Usage 15-19 Lang. Usage 3	36f	English 010
11. Correctly use punctuation.	Ch. 6	P. 77-79 150-153 158-161		M	Punct. 1-21	36e	English 010
12. Compose unified and complete paragraphs.	Ch. 9	Ch. 1-5			Paragraphs 1-12	36g, h	English 010
13. Refine spelling techniques.	Appendix A	P. 115 162-163 168			Spell. 1-22	36a, d	English 010
14. Recognize and correct shifts or inconsistencies to attain smoothness and clearness in writing.	Ch. 10	P. 54-55 196		A	Paragraphs 1-7	36h	English 020
15. Choose appropriate words to convey intended meaning.	Ch. 11-12	P. 54-55 196			Paragraphs 1-7 Word Know. 1-13 Lang. Use 1-12	36f-h	English 020
16. Expand vocabulary usage.	Ch. 11					26	English 020
17. Vary word and sentence choice for purpose and audience.	Ch. 10-14	P. 54-55 196			Paragraphs 1-12	26e 35 36f-h	English 020
18. Refine sentences and paragraphs into compositions exhibiting unity, clalrity, and coherence.	Ch. 10-14	Ch. 1-10			Sentence Structure 1-9 Paragraphs 1-12	35 36f-h	English 020

COMPETENCY/RESOURCE MATRIX

COMPETENCY STATEMENT	RESOURCES						
WRITING	BOOK 1	BOOK 2	COMP. 1	COMP. 2	COMP. 3	COMP. 4	COURSE
19. Use the composing process and electronic media to plan and generate writing.	Ch.9 Ch. 13-14	Ch. 1-10			Paragraphs 1-12	34	English 010 020
20. Write descriptive, persuasive, narrative, and expository paragraphs of increasing length and complexity.	Ch. 13-14	Ch. 1-5 Ch. 8-9			Paragraphs 1-12	35	English 020
21. Use electronic media to compose multiple-paragraph compositions.	Ch.13-14	Ch. 1-10			Paragraphs 1-12	34, 35	English 020
22. Evaluate and revise content, organization, topic development, appropriate transition, clarity of language, and appropriate word and sentence choice according to the purpose and audience for which the piece is intended.	Ch. 10-14	Ch. 1-10			Paragraphs 1-12 Lang. Usage 1-12 Cap. 1-18 Mech. 1-10	34-36	English 020
23. Proofread written work for punctuation, spelling, grammatical and syntactical errors, paragraph indentation, margins, and legibility of writing.	Ch. 6, 9 Ch. 10-14	Ch. 1-10		M	Punct. 1-21 Spell. 1-22 Cap. 1-18 Gram. 1-19 Mech. 1-10 Lang. Usage 1-12	36	English 010 020
24. Expand paragraphs into common types of reports.	Ch. 13	Ch. 7			Mech. 5-10	35	English 020
25. Compose business letters and communications.	Ch. 14	Ch. 6			Mech. 1-4		English 020
26. Write multiple-paragraph compositions incorporating outside information with documentation.	Ch. 13-14	Ch. 6				25, 27, 33-35	English 020

LEGEND:

BOOK 1 = Writing Skills for Technical Students, Delaware Technical & Community College, Prentice, 1992
BOOK 2 = Connections: Life Skills & Writing, Steck-Vaughn, 1992
COMP. 1 = Intellectual Software: Practical Grammar. Vers. 2.1. Computer software. Queue, 1984, PT 1
COMP. 2 = Intellectual Software: Practical Grammar. Vers. 2.1. Computer software. Queue, 1984, PT 2
COMP. 3 = Skills Bank. Vers. II and 3.1. Computer software. Skills Bank, 1994.
COMP. 4 = Job Skills Educational Program. Computer software. Loral, 1994.

PRE-TECH CLASS COURSE DESCRIPTION

PRE-TECH ENGLISH

ENG 010
WRITING SKILLS I (1-3-2)

An introductory course designed to instruct students in essential written communication skills. It includes studies in the sentence and its parts, punctuation, capitalization, the parts of speech, spelling, and language usage. Prerequisite: English placement test.

ENG 020
WRITING SKILLS II (2-2-3)

Review of basic sentence grammar and mechanical skills, with an emphasis on writing, editing, and revising paragraphs. Introduction to the multi-paragraph essay. Prerequisite: English placement test.

ENG 090
WRITING TASP REVIEW (0-2-1)

An intensive review of writing for students who have not passed the writing portion of the TASP. Instruction is focused on individual needs, employing computer software, written exercises, and videotape study guides Instruction is presented via lecture and practice in the Developmental and/or English labs.

ENGLISH 010/020 and
READING 020/030

INSTRUCTIONAL MODE:

This is a self-paced, individualized class. You will be given a diagnostic test to help determine what you already know and where best to begin. Your progress through assignments are recorded in your class folder. You need to be sure this is kept up to date. Work through your assignments, completing all exercises as indicated. **YOU ARE RESPONSIBLE FOR THE COMPLETION OF ALL ASSIGNMENTS.**

COMPUTER:

There are various computer programs we will be using depending upon individual student need. The reading classes will be working with the SkillsBank program. The writing classes will be using Practical Grammar, Job Skills Educational Program, and SkillsBank. You will be assigned an ID number and a password. It is your responsibility to keep this information accessible. A checklist will be provided to be kept in your folder. As you pass each lesson test, record your score on the checklist. If you do not pass the test, you may repeat it.

JOURNALS:

All writing students are required to keep a writing/spelling/vocabulary journal, which will be turned in for grading at the end of the quarter. Writing activities will be assigned during the lecture portion of the class. Students are to continuously add misspelled or difficult words to their spelling list by writing each word three times and then using it in a sentence. Students should continuously add new or unknown words to their vocabulary list by writing the definition and using the word in a sentence.

REFLECTION LOGS

At the end of each class all students will complete a Reflection Log, which is self-explanatory.

RULES FOR PAPERS TO BE TURNED IN:

All work which is turned in for grading must be properly headed. In the upper righthand corner write your name, your course, the current date, and the assignment. All work must be typed or written legibly. Sloppy work will not be accepted.

TEXTBOOKS:

In addition to the required textbooks listed in the course syllabus, all students must have a dictionary.

CLASS FOLDERS:

Each student will be given a class folder which will contain your Assignment Completion Record. The folder is to be filed in the white box for the English/ Reading classes behind the appropriate section.

ATTENDANCE:

You are expected to attend all classes until all requirements are satisfactorily met. There will be a daily sign-in sheet. You must sign-in when you enter and leave class, for any reason, including breaks. You must have the instructor or lab assistant verify your sign-in and out times.

GRADES:

Assignments will be graded on completion and accuracy. The grading scale is indicated in the course syllabus. Class participation is expected. Excessive absences will result in a lower grade.

You are expected to complete all assignments. If you attend all classes, but are unable to complete all assignments, you will be assigned an Incomplete. It is your responsibility to make arrangements with the Instructor to clear the incomplete. If you do not complete because of attendance or attitude, you will be given an F and expected to repeat the entire class.

LECTURE/LAB:

All students are scheduled for one to two hours of lecture per week. During this time the Instructor will lecture on text material, including grammar, spelling, vocabulary, and reading, and assign various writing activities. Lecture time is not the place to do homework. Lab time is for working on your computer assignments, getting help as needed, reviewing homework, taking tests, etc. It is not the place to do homework, unless instructed to do so.

FINAL EXAMINATION: All classes will have a final exam, as indicated in the course syllabus.

TASP TEST:

IF YOU HAVE NOT TAKEN TASP, YOU MUST DO SO BEFORE CONTINUING WITH YOUR MAJOR SUBJECTS. THE NEXT TASP TEST WILL BE GIVEN ON JUNE 18, 1994. THE REGISTRATION DEADLINE IS MAY 20, 1994. YOU MUST PASS TASP PRIOR TO OBTAINING 60 CREDIT HOURS. IF YOU DO NOT, YOU MUST REMAIN IN PRE-TECH CLASSES ONLY.

410

RESOURCES FOR PRE-TECHNICAL ENGLISH STUDIES

Behrman, Carol H. Hooked on Writing. West Nyack: Ctr. for App. Res. in Ed., 1990.

Delaware Technical & Community College. Writing for Technical Students. Englewood Cliffs: Prentice, 1992.

Garinger, Alan K. Beyond Words: Writing. A Workbook for the Mulltimedia Series. Westerville: Glencoe, 1992.

Hodges, John C., et. al. Harbrace College Handbook. Orlando: Harcourt, 1994.

Intellectual Software: Practical Grammar. Vers. 2.1. Computer software. Queue, 1984

Job Skills Educational Program. Computer software. Loral, 1994.

Malia, Kathleen and Warycka, Sharon. Read, Write, Relate. Orlando: Harcourt, 1991.

Sabin, William A.. The Gregg Reference Manual. 5th ed. New York: Gregg, 1977.

Semmelmeyer, Madeline. Practical English. 2 vols. Little Falls: Career, 1988.

Skills Bank. Vers. II and 3.1. Computer software. Skills Bank, 1994.

Troyka, Lynn Quitman. Simon & Schuster Handbook for Writers. Englewood Cliffs: Prentice, 1993.

Texas State
Technical College
Waco/Marshall

COURSE SYLLABUS

Writing Skills I
Title

ENGL 010
Number

Prerequisite

Cori Stanley
Prepared by

Approved by

May, 1994
Date

This Syllabus has been reviewed and is current on date indicated.

Reviewed by

Date

TEXAS STATE TECHNICAL COLLEGE

SYLLABUS

ENGLISH 010

COURSE DESCRIPTION:

An introductory course designed to instruct students in essential written communication skills. It includes studies in the sentence and its parts, punctuation, capitalization, the parts of speech, spelling, and language usage. Prerequisite: English placement test.

COURSE OBJECTIVES:

Upon completion, students will be able to:

1. Demonstrate knowledge of proper verb usage.
2. Demonstrate knowledge of proper use of adjectives and adverbs.
3. Demonstrate proper use of verbal and prepositional phrases.
4. Demonstrate understanding of subject-verb agreement.
5. Demonstrate use of independent and dependent clauses.
6. Demonstrate knowledge of punctuation.
7. Demonstrate understanding of fragmented sentences.
8. Demonstrate knowledge of proper use of pronouns and antecedents.
9. Use all parts of speech effectively in sentences.
10. Refine spelling techniques and patterns.
11. Produce sentences that convey coordinate and subordinate ideas appropriately.
12. Use a variety of sentence structures including simple, compound, complex, and compound-complex.
13. Demonstrate the fundamentals of paragraph writing.

COURSE OUTLINE:

This is an individualized, self-paced course. All students are responsible for attending all classes until the requirements are met. Students will take a diagnostic test to determine placement and assignments. Students will be assigned various grammar modules (or comparable computer activities). At the completion of each module, the student will be given an appropriate module test. If the test is passed with 75% or better, the student will be given an applied writing exercise, including those for exempted modules. At the completion of all modules and applied writings, the student will take an in-class final grammar test. Upon passing, the student will go on to the paragraph writing module.

The class is scheduled for lecture and lab. During the lecture portion, the Instructor will review text material, grammar, spelling, vocabulary, and reading, and assign various writing activities. Lab time is for working on your computer assignments, getting help as needed, reviewing homework, taking tests, etc. During lab, students will complete JSEP Lessons 26, 36, 34, 27, and 25, in this order. The instructor will be available during all lab times. Lecture/lab hours will vary according to student needs.

All students will keep a writing/vocabulary/spelling journal. This journal will be collected at the end of the quarter.

There will be a final grammar exam and a final in-class paragraph writing assignment.

ENGLISH 010/020 and
READING 020/030

INSTRUCTIONAL MODE:

This is a self-paced, individualized class. You will be given a diagnostic test to help determine what you already know and where best to begin. Your progress through assignments are recorded in your class folder. You need to be sure this is kept up to date. Work through your assignments, completing all exercises as indicated. **YOU ARE RESPONSIBLE FOR THE COMPLETION OF ALL ASSIGNMENTS.**

COMPUTER:

There are various computer programs we will be using depending upon individual student need. The reading classes will be working with the SkillsBank program. The writing classes will be using Practical Grammar, Job Skills Educational Program, and SkillsBank. You will be assigned an ID number and a password. It is your responsibility to keep this information accessible. A checklist will be provided to be kept in your folder. As you pass each lesson test, record your score on the checklist. If you do not pass the test, you may repeat it.

JOURNALS:

All writing students are required to keep a writing/spelling/vocabulary journal, which will be turned in for grading at the end of the quarter. Writing activities will be assigned during the lecture portion of the class. Students are to continuously add misspelled or difficult words to their spelling list by writing each word three times and then using it in a sentence. Students should continuously add new or unknown words to their vocabulary list by writing the definition and using the word in a sentence.

REFLECTION LOGS

At the end of each class all students will complete a Reflection Log, which is self-explanatory.

RULES FOR PAPERS TO BE TURNED IN:

All work which is turned in for grading must be properly headed. In the upper righthand corner write your name, your course, the current date, and the assignment. All work must be typed or written legibly. Sloppy work will not be accepted.

TEXTBOOKS:

In addition to the required textbooks listed in the course syllabus, all students must have a dictionary.

CLASS FOLDERS:

Each student will be given a class folder which will contain your Assignment Completion Record. The folder is to be filed in the white box for the English/ Reading classes behind the appropriate section.

ATTENDANCE:

You are expected to attend all classes until all requirements are satisfactorily met. There will be a daily sign-in sheet. You must sign-in when you enter and leave class, for any reason, including breaks. You must have the instructor or lab assistant verify your sign-in and out times.

GRADES:

Assignments will be graded on completion and accuracy. The grading scale is indicated in the course syllabus. Class participation is expected. Excessive absences will result in a lower grade.

You are expected to complete all assignments. If you attend all classes, but are unable to complete all assignments, you will be assigned an Incomplete. It is your responsibility to make arrangements with the Instructor to clear the incomplete. If you do not complete because of attendance or attitude, you will be given an F and expected to repeat the entire class.

LECTURE/LAB:

All students are scheduled for one to two hours of lecture per week. During this time the Instructor will lecture on text material, including grammar, spelling, vocabulary, and reading, and assign various writing activities. Lecture time is not the place to do homework. Lab time is for working on your computer assignments, getting help as needed, reviewing homework, taking tests, etc. It is not the place to do homework, unless instructed to do so.

FINAL EXAMINATION: All classes will have a final exam, as indicated in the course syllabus.

TASP TEST:

IF YOU HAVE NOT TAKEN TASP, YOU MUST DO SO BEFORE CONTINUING WITH YOUR MAJOR SUBJECTS. THE NEXT TASP TEST WILL BE GIVEN ON JUNE 18, 1994. THE REGISTRATION DEADLINE IS MAY 20, 1994. YOU MUST PASS TASP PRIOR TO OBTAINING 60 CREDIT HOURS. IF YOU DO NOT, YOU MUST REMAIN IN PRE-TECH CLASSES ONLY.

TEXTBOOK AND REQUIRED MATERIAL:

1. WRITING SKILLS FOR TECHNICAL STUDENTS, Delaware Technical & Community College, Prentice Hall.
2. College-level Dictionary
3 Notebook or binder and paper (not spiral)
4. 3-section notebook or binder
5. Writing implements

GRADING POLICY:

CLASSWORK

1 JOURNAL (W = 5/V = 2.5/S = 2.5) = 10 POINTS
5 TESTS @ 2 POINTS EACH = 10 POINTS
5 COMPUTER @ 1 POINTS EACH = 5 POINTS
5 IN-CLASS PARAGRAPHS @ 5 POINTS EACH = 25 POINTS

50 POINTS (25%)

TEXTBOOK

8 GRAMMAR MODULE @ 1.5 POINTS EACH = 20 POINTS
4 PARAGRAPHS @ 5 POINTS EACH = 20 POINTS
1 IN-CLASS GRAMMAR FINAL = 10 POINTS

50 POINTS (25%)

FINAL EXAMS

1 GRAMMAR FINAL = 50 POINTS
1 PARAGRAPH FINAL = 50 POINTS

100 POINTS (50%)

TOTAL POINTS = 200 POINTS

A = 180+

B = 160-179

C = 140-159

F = Below 140

ABSENCES = -5 POINTS EACH

ENGLISH 010

CURRICULUM PACKAGE

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COURSE SYLLABUS 53

DATE: 03/21/94

TEXAS STATE TECHNICAL COLLEGE
GOAL/OBJECTIVE LISTING - ABBREVIATED PROCESS

URSE: ENGL.010 WRITING SKILLS I
DEPARTMENT: ENGL PRE-TECH ENGLISH

G/O NUMBER	TITLE	DOMAIN	LEVEL	LEC	LAB	PRAC	FLD
E010.01.00	LEARNING BASIC GRAMMAR SKILLS						
E010.01.01	Demonstrate knowledge of proper verb usage.	COGNITIVE	APPLY	1.0	3.0	1.0	
E010.01.02	Demonstrate knowledge and proper use of adjectives and adverbs.	COGNITIVE	APPLY	1.0	3.0	1.0	
E010.01.03	Demonstrate proper use of verbal and prepositional phrases.	COGNITIVE	APPLY	1.0	3.0	1.0	
E010.01.04	Demonstrate understanding of subject-verb agreement.	COGNITIVE	APPLY	1.0	3.0	1.0	
E010.01.05	Demonstrate use of independent and dependent clauses.	COGNITIVE	APPLY	1.0	3.0	1.0	
E010.01.06	Demonstrate knowledge of punctuation.	COGNITIVE	APPLY	1.0	3.0	1.0	
E010.01.07	Demonstrate understanding of fragmented sentences.	COGNITIVE	APPLY	1.0	3.0	1.0	
E010.01.08	Demonstrate knowledge and proper use of pronouns and antecedents.	COGNITIVE	APPLY	1.0	3.0	1.0	
E010.02.00	LEARNING BASIC WRITING SKILLS						
E010.02.01	Demonstrate the fundamentals of paragraph writing.	COGNITIVE	APPLY	1.0	3.0	3.0	

DATE: 03/19/94 TEXAS STATE TECHNICAL COLLEGE PAGE: 1
PERFORMANCE STANDARDS

COURSE: ENGL.010 WRITING SKILLS I
DEPARTMENT: ENGL PRE-TECH ENGLISH

OBJECTIVE: E010.01.00 LEARNING BASIC GRAMMAR SKILLS

OBJECTIVE: E010.01.01 Demonstrate knowledge of proper verb usage.

IMPORTANCE OF OBJECTIVE

It is necessary for students to understand verb usage so that will be able to construct effective sentences.

STUDENT WILL

Be able to recognize, identify, and properly use action, linking, helping and irregular verbs.

TO THIS STANDARD

Students will pass all tests with a score of 75 percent or better, and generate effective sentences in all Applied Writings to the instructor's satisfaction.

ON THIS TYPE TEST(S)

Students will complete Module I Test A and Applied Writing I.

OBJECTIVE: E010.01.02 Demonstrate knowledge and proper use of adjectives and adverbs.

IMPORTANCE OF OBJECTIVE

It is necessary for students to understand adjectives and adverbs so that they will be able to construct effective sentences.

STUDENT WILL

Be able to recognize, identify, and properly use adjectives and adverbs.

TO THIS STANDARD

Students will pass all module tests with a score of 75 percent or better and generate effective sentences in all Applied Writings, to the instructor's satisfaction.

ON THIS TYPE TEST(S)

Students will complete Module II Test A and Applied Writing II.

OBJECTIVE: E010.01.03 Demonstrate proper use of verbal and prepositional phrases.

IMPORTANCE OF OBJECTIVE

It is necessary for students to understand verbal and prepositional phrases so that they will be able to construct effective sentences.

STUDENT WILL

Be able to recognize, identify, and properly use verbal and prepositional phrases.

TO THIS STANDARD

Students will pass all module tests with a score of 75 percent or better an generate effective sentences in all Applied Writings, to the instructor's satisfaction.

ON THIS TYPE TEST(S)

Students will complete Module III Test A and Applied Writing III.

OBJECTIVE: E010.01.04 Demonstrate understanding of subject-verb agreement.

IMPORTANCE OF OBJECTIVE

It is necessary for students to understand subject-verb agreement so that they will be able to construct effective sentences.

STUDENT WILL

Perform the described task/skill.

TO THIS STANDARD

Students will pass all module tests with a score of 75 percent or better and generate effective sentences in all Applied Writings, to the instructor's satisfaction.

ON THIS TYPE TEST(S)

Students will complete Module IV Test A and Applied Writing IV.

OBJECTIVE: E010.01.05 Demonstrate use of independent and dependent clauses.

IMPORTANCE OF OBJECTIVE

It is necessary for students to understand clauses so that they will be abl to construct effective sentences.

STUDENT WILL

Be able to recognize, identify, and properly use independent and dependent clauses.

TO THIS STANDARD

Students will pass all module tests with a score of 75 percent or better an generate effective sentences in all Applied Writings, to the instructor's satisfaction.

ON THIS TYPE TEST(S)

Students will complete Module V Test A and Applied Writing V.

OBJECTIVE: E010.01.05 Demonstrate use of independent and dependent clauses.

IMPORTANCE OF OBJECTIVE

It is necessary for students to understand clauses so that they will be abl to construct effective sentences.

STUDENT WILL

Be able to recognize, identify, and properly use independent and dependent clauses.

TO THIS STANDARD

Students will pass all module tests with a score of 75 percent or better an generate effective sentences in all Applied Writings, to the instructor's satisfaction.

ON THIS TYPE TEST(S)

Students will complete Module V Test A and Applied Writing V.

OBJECTIVE: E010.01.06 Demonstrate knowledge of punctuation.

IMPORTANCE OF OBJECTIVE

It is necessary for students to understand punctuation so that they will be able to construct effective sentences.

STUDENT WILL

Perform the described task/skill.

TO THIS STANDARD

Students will pass all module tests with a score of 75 percent or better and generate effective sentences in all Applied Writings, to the instructor's satisfaction.

ON THIS TYPE TEST(S)

Students will complete Module VI Test A and Applied Writing VI.

OBJECTIVE: E010.01.07 Demonstrate understanding of fragmented sentences.

IMPORTANCE OF OBJECTIVE

It is necessary for students to understand sentence fragments and run-ons so that they will be able to construct effective sentences.

STUDENT WILL

Be able to recognize, identify, and correct sentence fragments and run-ons.

TO THIS STANDARD

Students will pass all module tests with a score of 75 percent or better and generate effective sentences in all Applied Writings, to the instructor's satisfaction.

ON THIS TYPE TEST(S)

Students will complete Module VII Test A and Applied Writing VII.

OBJECTIVE: E010.01.08 Demonstrate knowledge and proper use of pronouns and antecedents.

IMPORTANCE OF OBJECTIVE

It is necessary for students to understand pronoun usage so that will be able to construct effective sentences.

STUDENT WILL

Be able to recognize, identify, and properly use pronouns.

TO THIS STANDARD

Students will pass all module tests with a score of 75 percent or better a generate effective sentences in all Applied Writings, to the instructor's satisfaction.

ON THIS TYPE TEST(S)

Students will complete Module VIII Test A and Applied Writing VIII.

OBJECTIVE: E010.02.00 LEARNING BASIC WRITING SKILLS

OBJECTIVE: E010.02.01 Demonstrate the fundamentals of paragraph writing.

IMPORTANCE OF OBJECTIVE

It is necessary for students to understand the fundamentals of paragraph writing so that they will be able to construct effective paragraphs.

STUDENT WILL

Perform the described task/skill.

TO THIS STANDARD

Students will complete assignments to instructor's satisfaction.

ON THIS TYPE TEST(S)

Written Performance-based assignments.

COURSE: ENGL.010 WRITING SKILLS I
DEPARTMENT: ENGL PRE-TECH ENGLISH

OBJECTIVE: E010.01.01 Demonstrate knowledge of proper verb usage.

SUB-OBJECTIVE: E010.01.01.01 Recognize action and linking verbs.
DOMAIN: COGNITIVE LEVEL: RECALL

PURPOSE

To distinguish between action and linking verbs and their role in sentence construction.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

The verb is one of the most important parts of speech and must be understoc in order to write effectively.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module I.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module I.

SUB-OBJECTIVE: E010.01.01.02 Identify helping verbs.
DOMAIN: COGNITIVE LEVEL: RECALL

PURPOSE

To identify helping verbs.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

The verb is one of the most important parts of speech and must be understood in order to write effectively.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules; prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module I.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module I.

SUB-OBJECTIVE: E010.01.01.03 Identify and correctly use the principal parts of verbs, both regular and irregular.

DOMAIN: COGNITIVE LEVEL: RECALL

PURPOSE

To identify and correctly use the principal parts of verbs, both regular and irregular.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

The verb is one of the most important parts of speech and must be understood in order to write effectively.

INSTRUCTIONAL METHODS

Textbooks, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module I.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module I.

SUB-OBJECTIVE: E010.01.01.04 Generate sentences using identified verb type.

DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To generate sentences using identified verb types.

PRETEST

None.

INTEREST

The verb is one of the most important parts of speech and must be understood in order to write effectively.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists, assign Applied Writing activities.

STUDENT ACTIVITIES

Complete all assignments in Module I.

ASSESSMENT

Instructor verification and Module I test.

NEXT ASSIGNMENT

Next module on assignment sheet.

OBJECTIVE: E010.01.02 Demonstrate knowledge and proper use of adjectives and adverbs.

SUB-OBJECTIVE: E010.01.02.01 Identify the function of adjectives and adverbs in a sentence.

DOMAIN: COGNITIVE LEVEL: RECALL

PURPOSE

To identify the function of adjectives and adverbs in a sentence.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

To write descriptive sentences.

INSTRUCTIONAL METHODS

Textbooks, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in Textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module II.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module II.

SUB-OBJECTIVE: E010.01.02.02 Differentiate between adjectives and adverbs.
DOMAIN: COGNITIVE LEVEL: RECALL

PURPOSE

To differentiate between adverbs and adjectives.

PRETEST

Diagnostic knowledge-based pre-test consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

To write descriptive sentences.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules; prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module II.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module II.

SUB-OBJECTIVE: E010.01.02.03 Use the comparison process for adjectives and adverbs.

DOMAIN: COGNITIVE LEVEL: RECALL

PURPOSE

Use the comparison process for adjectives and adverbs.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

To write descriptive sentences.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules; prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module II.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module II.

SUB-OBJECTIVE: E010.01.02.04 Generate sentences using adjectives and adverbs.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

Generate sentences using adjectives and adverbs.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

To write descriptive sentences.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules; prepare necessary checklists, assign Applied Writing activities.

STUDENT ACTIVITIES

Complete all assignments in Module II.

ASSESSMENT

Instructor verification and Module II test.

NEXT ASSIGNMENT

Next module on assignment sheet.

OBJECTIVE: E010.01.03 Demonstrate proper use of verbal and prepositional phrases.

SUB-OBJECTIVE: E010.01.03.01 Define a phrase.
DOMAIN: COGNITIVE LEVEL: RECALL

PURPOSE

To define phrases and their function.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

To write effective sentences.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module III.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module III.

SUB-OBJECTIVE: E010.01.03.02 Identify the prepositional phrase and its function in a sentence.

DOMAIN: COGNITIVE LEVEL: RECALL

PURPOSE

To identify the prepositional phrase and its function in a sentence.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assigns.

INTEREST

To write effective sentences.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module III.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module III.

SUB-OBJECTIVE: E010.01.03.03 Identify the verbal phrase and its function in a sentence.

DOMAIN: COGNITIVE LEVEL: RECALL

PURPOSE

To identify the verbal phrase and its function in a sentence.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

To write effective sentences.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module III.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module III.

SUB-OBJECTIVE: E010.01.03.04 Generate sentences using verbal and prepositional phrases.

DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To generate effective sentences using verbal and prepositional phrases.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

To write effective sentences.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists, assign Applied Writing activities.

STUDENT ACTIVITIES

Complete all assignments in Module III.

ASSESSMENT

Instructor verification and Module III test.

NEXT ASSIGNMENT

Next module on assignment sheet.

OBJECTIVE: E010.01.04 Demonstrate understanding of subject-verb agreement.

SUB-OBJECTIVE: E010.01.04.01 Identify correct subject-verb agreement by applying practical methods of sentence analysis.

DOMAIN: COGNITIVE LEVEL: EVALUATE

PURPOSE

To identify correct subject-verb agreement by applying practical methods of sentence analysis.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

All sentences must have subject-verb agreement. Student must be able to recognize and correct agreement errors.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module IV.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module IV.

SUB-OBJECTIVE: E010.01.04.02 Generate sentences using correct subject-verb agreement.

DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

Generate sentences using correct subject-verb agreement.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

All sentences must contain subject-verb agreement. Students must be able to write properly constructed sentences.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists, assign Applied Writing Activities.

STUDENT ACTIVITIES

Complete all sections in Module IV.

ASSESSMENT

Instructor verification and Module IV test.

NEXT ASSIGNMENT

Next module on assignment sheet.

OBJECTIVE: E010.01.05 Demonstrate use of independent and dependent clauses.

SUB-OBJECTIVE: E010.01.05.01 Identify independent clauses.
DOMAIN: COGNITIVE LEVEL: RECALL

PURPOSE

To identify independent clauses.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

To write effective sentences.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all sections in Module V.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module V.

SUB-OBJECTIVE: E010.01.05.02 Identify dependent clauses.
DOMAIN: COGNITIVE LEVEL: RECALL

PURPOSE

To identify dependent clauses.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

To write effective sentences.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module V.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module V.

SUB-OBJECTIVE: E010.01.05.03 Recognize appropriate clause connectors.
DOMAIN: COGNITIVE LEVEL: RECALL

PURPOSE

Recognize clause connectors.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

Effective writing requires the use of compound and complex sentences, whic requires proper use of clause connectors.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module V.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module V.

SUB-OBJECTIVE: E010.01.05.04 Recognize and punctuate clauses correctly.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To recognize and punctuate clauses correctly.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

Effective writing requires the use of compound and complex sentences, which must be properly punctuated.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module V.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module V.

SUB-OBJECTIVE: E010.01.05.05 Generate sentences using a variety of independent/dependent clause cominations.

DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To generate compound and complex sentences.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

Effective writing requires the use of compound and complex sentences.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists, assign Applied Writing activities.

STUDENT ACTIVITIES

Complete all assignments in Module V.

ASSESSMENT

Instructor verification and Module V test.

NEXT ASSIGNMENT

Next module on assignment sheet.

OBJECTIVE: E010.01.06 Demonstrate knowledge of punctuation.

SUB-OBJECTIVE: E010.01.06.01 Identify the five basic patterns of punctuation.

DOMAIN: COGNITIVE LEVEL: RECALL

PURPOSE

To identify the five basic patterns of punctuation.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

All writing must be properly punctuated.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module VI.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module VI.

SUB-OBJECTIVE: E010.01.06.02 Generate sentences using the five punctuation patterns.

DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To write correctly punctuated sentences.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

All writing must be properly punctuated.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules; prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module VI.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module VI.

SUB-OBJECTIVE: E010.01.06.03 Apply the five basic comma rules for correct sentence construction.

DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

Apply comma rules for correct sentence construction.

PRETEST

Diagnostic knowledge-based pretest consisting of fil-ins and multiple choice items to determine placement and assignments.

INTEREST

All writing must be properly punctuated and constructed.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign module sin textbook, assign CAI modules; prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module VI.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module VI.

SUB-OBJECTIVE: E010.01.06.04 Apply the two rules governing the apostrophe to show possession.

DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

Appropriate use of the apostrophe.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

It is necessary to understand how the apostrophe is used to show possession.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module VI.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module VI.

SUB-OBJECTIVE: E010.01.06.05 Use the five-step process to form possessives.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To properly form possessives.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

Properly constructed possessive are necessary for effective writing.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists, assign Applied Writing activities.

STUDENT ACTIVITIES

Complete all assignments in Module VI.

ASSESSMENT

Instructor verification and Module VI test.

NEXT ASSIGNMENT

Next module on assignment sheet.

OBJECTIVE: E010.01.07 Demonstrate understanding of fragmented sentences.

SUB-OBJECTIVE: E010.01.07.01 Identify and correct sentence fragments.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To identify and correct fragmented sentences.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

A sentence must express a complete thought and may not contain fragments.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module VII.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module VII.

SUB-OBJECTIVE: E010.01.07.02 Identify run-on sentences and punctuate them for clarity.

DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To identify and correct run-on sentences.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

Run-on sentences are not appropriate to effective writing.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists, assign Applied Writing activities.

STUDENT ACTIVITIES

Complete all assignments in Module VII.

ASSESSMENT

Instructor verification and Module VII test.

NEXT ASSIGNMENT

Next module on assignment sheet.

OBJECTIVE: E010.01.08 Demonstrate knowledge and proper use of pronouns and antecedents.

SUB-OBJECTIVE: E010.01.08.01 Identify correct forms of personal pronouns for various uses in a sentence.

DOMAIN: COGNITIVE LEVEL: RECALL

PURPOSE

To identify correct forms of personal pronouns.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

Personal pronouns have a variety of uses in a sentence and must be used correctly.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module VIII.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module VIII.

SUB-OBJECTIVE: E010.01.08.02 Apply the six rules governing pronoun-antecedent agreement in number.

DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

Apply pronoun-antecedent rules.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

Pronouns and antecedents must agree in number.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module VIII.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module VIII.

SUB-OBJECTIVE: E010.01.08.03 Generate sentences using proper pronoun-antecedent agreement.

DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To generate sentences using proper pronoun-antecedent agreement.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

Effective sentences require pronoun-antecedent agreement.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists, assign Applied Writing activities.

STUDENT ACTIVITIES

Complete all assignments in Module VIII.

ASSESSMENT

Instructor verification and Module VIII test.

NEXT ASSIGNMENT

Next module on assignment sheet.

COURSE: ENGL.010 WRITING SKILLS I
DEPARTMENT: ENGL PRE-TECH ENGLISH

OBJECTIVE: E010.02.01 Demonstrate the fundamentals of paragraph writing.

SUB-OBJECTIVE: E010.02.01.01 Choose an appropriate topic for a paragraph.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To select an appropriate topic for a paragraph.

PRETEST

None.

INTEREST

Before beginning any writing project, an appropriate topic must be selected.

INSTRUCTIONAL METHODS

Textbook, lecture, brainstorming, guided writing.

INSTRUCTOR'S ACTIVITIES

Discuss and demonstrate topic selection methods, including brainstorming techniques; assign guided writing activity; assign textbook activity.

STUDENT ACTIVITIES

Complete all assignments.

ASSESSMENT

Instructor verification,

NEXT ASSIGNMENT

Complete next section in Module IX.

SUB-OBJECTIVE: E010.02.01.02 Construct a topic sentence with a controlling idea.

DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

An unified paragraph requires an effective topic sentence and controlling idea.

PRETEST

None.

INTEREST

Effective paragraph structure requires an appropriate topic sentence and controlling idea.

INSTRUCTIONAL METHODS

Textbook, CAI modules, lecture, guided writing.

INSTRUCTOR'S ACTIVITIES

Assign textbook activity, assign guided writing activity, assign CAI modules.

STUDENT ACTIVITIES

Complete all assignments.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Complete next section in Module IX.

SUB-OBJECTIVE: E010.02.01.03 Outline a coherent paragraph.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To use outline techniques.

PRETEST

None.

INTEREST

Outlining techniques lead to enhanced writing skills.

INSTRUCTIONAL METHODS

Textbook, CAI modules, guided writing.

INSTRUCTOR'S ACTIVITIES

Assign textbook activity, assign CAI modules, assign guided writing activity.

STUDENT ACTIVITIES

Complete all assignments.

ASSESSMENT

Instructor verification,

NEXT ASSIGNMENT

Complete next section in Module IX.

SUB-OBJECTIVE: E010.02.01.04 Write a cohesive reasons paragraph.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To write a paragraph with supporting reasons.

PRETEST

None.

INTEREST

Students need to be able to support their position in an clear and concise manner.

INSTRUCTIONAL METHODS

Textbook, demonstration, lecture, guided writing.

-INSTRUCTOR'S ACTIVITIES

Demonstrate assignment, assign textbook activity, assign guided writing activity.

STUDENT ACTIVITIES

Complete all assignments.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Complete next section in Module IX.

SUB-OBJECTIVE: E010.02.01.05 Write a cohesive reasons and examples paragraph.

DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To write a paragraph with supporting reasons and examples.

PRETEST

None.

INTEREST

Students need to be able to support their position and provide examples in a clear and concise manner.

INSTRUCTIONAL METHODS

Textbook, demonstration, lecture, guided writing.

INSTRUCTOR'S ACTIVITIES

Demonstrate assignment, assign guided writing activity, assign textbook activity.

STUDENT ACTIVITIES

Complete all assignments.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Complete next section in Module IX.

SUB-OBJECTIVE: E010.02.01.06 Write a cohesive pro and con paragraph.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To write a paragraph presenting both sides of an issue.

PRETEST

None.

INTEREST

Students must be able to present and develop both sides of an issue.

INSTRUCTIONAL METHODS

Textbook, demonstration, lecture, guided writing.

INSTRUCTOR'S ACTIVITIES

Demonstrate assignment, assign textbook activity, assign guided writing activity.

STUDENT ACTIVITIES

Complete all assignments.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Complete next section in Module IX.

SUB-OBJECTIVE: E010.02.01.07 Write a cohesive process paragraph.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To present a step-by-step process in paragraph form.

PRETEST

None.

INTEREST

Students must be able to provide explicit instructions.

INSTRUCTIONAL METHODS

Textbook, demonstration, lecture.

INSTRUCTOR'S ACTIVITIES

Demonstrate assignment, assign textbook activity.

STUDENT ACTIVITIES

Complete all assignments.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

None unless directed by instructor.

TEXAS STATE TECHNICAL COLLEGE

SYLLABUS

ENGLISH 010

COURSE DESCRIPTION:

An introductory course designed to instruct students in essential written communication skills. It includes: language usage and mechanics, grammar, the writing process, and paragraph writing.

COURSE OBJECTIVES:

To help students write and prepare various documents and presentations using appropriate and correct language mechanics including: grammar, spelling, capitalization and punctuation.

TEXTBOOK AND REQUIRED MATERIAL:

1. WRITING SKILLS FOR TECHNICAL STUDENTS, Delaware Technical & Community College, Prentice Hall.
2. Dictionary
3 3-ring binder and paper (not spiral)
4. Notebook
5. Writing implements

COURSE OUTLINE

All students will take a diagnostic test to determine placement and assignments. Students will be assigned various grammar modules (or comparable computer activities). At the completion of each module, the student will be given an appropriate module test. If the test is passed with 75% or better, the student will be given an applied writing exercise, including those for exempted modules. At the completion of all modules and applied writings, the student will take an in-class final grammar test. Upon passing, the student will go on to the paragraph writing module.

During lab, students will complete JSEP Lesson 26, 36, 34, 27, and 25.

All students will keep a writing/vocabulary/spelling journal.

In addition, students will be given a variety of in-class tests on spelling, vocabulary and sentence structure, as well as, various writing assignments.

There will be a final grammar exam, including paragraph writing.

GRADING POLICY

CLASSWORK

1 JOURNAL (W = 10/V = 5/S = 5)	=	20 POINTS	2%
6 TESTS @ 10 POINTS EACH	=	60 POINTS	6%
5 COMPUTER @ 10 POINTS EACH	=	50 POINTS	5%
5 IN-CLASS PARAGRAPHS @ 20 POINTS EACH	=	100 POINTS	10%
2 IN-CLASS ESSAYS @ 50 POINTS EACH	=	100 POINTS	10%
		330 TOTAL	33%

TEXTBOOK

8 GRAMMAR MODULE @ 20 POINTS EACH	=	160 POINTS	16%
4 PARAGRAPHS @ 40 POINTS EACH	=	160 POINTS	16%
1 IN-CLASS GRAMMAR FINAL	=	100 POINTS	10%
		420 TOTAL	42%

FINAL EXAMS

1 GRAMMAR FINAL	=	125 POINTS	12.5%
1 PARAGRAPH FINAL	=	125 POINTS	12.5%
		250 TOTAL	25%

A = 900+

B = 800-899

C = 700-799

F = Below 700

ABSENCES = -50 POINTS EACH

TYPOS = -1 POINT EACH
PUNCTUATION = -1 POINT EACH
GRAMMAR = -1 POINT EACH
STRUCTURE/CONTENT = -2 POINTS EACH

Texas State
Technical College
Waco/Marshall

COURSE SYLLABUS

WRITING SKILLS II
Title

ENG- 020
Number

Prerequisite

CORI STANLEY
Prepared by

Approved by

MAY, 1994
Date

This Syllabus has been reviewed and is current on date indicated.

Reviewed by

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Date

TEXAS STATE TECHNICAL COLLEGE

SYLLABUS

ENGLISH 020

COURSE DESCRIPTION:

Review of basic sentence grammar and mechanical skills, with an emphasis on writing, editing, and revising paragraphs. Introduction to the multi-paragraph essay. Prerequisite: English placement test.

COURSE OBJECTIVES:

Upon completion, student will be able to:

1. Recognize and correct shifts or inconsistencies to attain smoothness and clearness in writing.
2. Develop writing clarity and prevent misunderstanding.
3. Demonstrate accelerated techniques to make writing more concise.
4. Choose appropriate words to convey intended meaning.
5. Expand vocabulary usage.
6. Vary word and sentence choice for purpose and audience.
7. Refine sentences and paragraphs into compositions exhibiting unity, clarity, and coherence.
8. Use the composing process and electronic media to plan and generate writing.
9. Write descriptive, persuasive, narrative, and expository paragraphs of increasing length and complexity.
10. Use electronic media to compose multiple-paragraph compositions.

11. Evaluate and revise content, organization, topic development, appropriate transition, clarity of language and appropriate word and sentence choice according to the purpose and audience for which the piece is intended.

12. Proofread written work for punctuation, spelling, grammatical and syntactical errors, paragraph indentation, margins, and legibility of writing.

13. Expand paragraphs into common types of reports.

14. Compose business letters and communications.

COURSE OUTLINE:

This is an individualized, self-paced course. All students are responsible for attending all classes until the requirements are met. Students will take a diagnostic test to determine placement and assignments. Students will be assigned various grammar modules (or comparable computer activities). At the completion of each module, the student will be given an appropriate module test. If the test is passed with 75% or better, the student will be given an applied writing exercise, including those for exempted modules. At the completion of all modules and applied writings, the student will take an in-class final grammar test. Upon passing, the student will go on to the report writing module, followed by the business letter module.

The class is scheduled for lecture and lab. During the lecture portion, the instructor will review text material, grammar, spelling, vocabulary, and reading, and assign various writing activities. Lab time is for working on your computer assignments, getting help as needed, reviewing homework, taking tests, etc. During lab, students will complete SkillsBank, as assigned. The instructor will be available during all lab times. Lecture/lab hours will vary according to student needs.

All students will keep a writing/vocabulary/spelling journal. This journal will be collected at the end of the quarter.

There will be a final in-class report and a final grammar examination.

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TEXTBOOK AND REQUIRED MATERIAL:

1. WRITING SKILLS FOR TECHNICAL STUDENTS. Delaware Technical & Community College. Prentice Hall.
2. College-level Dictionary
3. Notebook or binder and paper (not spiral)
4. 3-section notebook or binder
5. Writing implements

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GRADING POLICY:

CLASSWORK

1 JOURNAL (W = 3/V = 2 S = 2) = 7 POINTS
5 TESTS @ 2 POINTS EACH = 10 POINTS
8 COMPUTER @ 1 POINTS EACH = 8 POINTS
5 IN-CLASS PARAGRAPHS @ 5 POINTS EACH = 25 POINTS

50 POINTS (25%)

TEXTBOOK

5 MISCELLANEOUS TESTS @ 1.5 POINTS EACH = 6.5 POINTS
3 GRAMMAR MODULE @ 1.5 POINTS EACH = 4.5 POINTS
4 REPORTS @ 2.5 POINTS EACH = 10 POINTS
4 LETTERS @ 2.5 POINTS EACH = 10 POINTS
1 IN-CLASS GRAMMAR FINAL = 10 POINTS

50 POINTS (25%)

FINAL EXAMS

1 GRAMMAR FINAL = 50 POINTS
1 PARAGRAPH FINAL = 50 POINTS

100 POINTS (50%)

TOTAL POINTS = 200 POINTS

A = 180 –

B = 160-179

C = 140-159

F = Below 140

ABSENCES = -5 POINTS EACH

ENGLISH 010/020 and
READING 020/030

INSTRUCTIONAL MODE:

This is a self-paced, individualized class. You will be given a diagnostic test to help determine what you already know and where best to begin. Your progress through assignments are recorded in your class folder. You need to be sure this is kept up to date. Work through your assignments, completing all exercises as indicated. YOU ARE RESPONSIBLE FOR THE COMPLETION OF ALL ASSIGNMENTS.

COMPUTER:

There are various computer programs we will be using depending upon individual student need. The reading classes will be working with the SkillsBank program. The writing classes will be using Practical Grammar, Job Skills Educational Program, and SkillsBank. You will be assigned an ID number and a password. It is your responsibility to keep this information accessible. A checklist will be provided to be kept in your folder. As you pass each lesson test, record your score on the checklist. If you do not pass the test, you may repeat it.

JOURNALS:

All writing students are required to keep a writing/spelling/vocabulary journal, which will be turned in for grading at the end of the quarter. Writing activities will be assigned during the lecture portion of the class. Students are to continuously add misspelled or difficult words to their spelling list by writing each word three times and then using it in a sentence. Students should continuously add new or unknown words to their vocabulary list by writing the definition and using the word in a sentence.

REFLECTION LOGS

At the end of each class all students will complete a Reflection Log, which is self-explanatory.

RULES FOR PAPERS TO BE TURNED IN:

All work which is turned in for grading must be properly headed. In the upper righthand corner write your name, your course, the current date, and the assignment. All work must be typed or written legibly. Sloppy work will not be accepted.

TEXTBOOKS:

In addition to the required textbooks listed in the course syllabus, all students must have a dictionary.

CLASS FOLDERS:

Each student will be given a class folder which will contain your Assignment Completion Record. The folder is to be filed in the white box for the English Reading classes behind the appropriate section.

ATTENDANCE:

You are expected to attend all classes until all requirements are satisfactorily met. There will be a daily sign-in sheet. You must sign-in when you enter and leave class, for any reason, including breaks. You must have the instructor or lab assistant verify your sign-in and out times.

GRADES:

Assignments will be graded on completion and accuracy. The grading scale is indicated in the course syllabus. Class participation is expected. Excessive absences will result in a lower grade.

You are expected to complete all assignments. If you attend all classes, but are unable to complete all assignments, you will be assigned an incomplete. It is your responsibility to make arrangements with the instructor to clear the incomplete. If you do not complete because of attendance or attitude, you will be given an F and expected to repeat the entire class.

LECTURE/LAB:

All students are scheduled for one to two hours of lecture per week. During this time the instructor will lecture on text material, including grammar, spelling, vocabulary, and reading, and assign various writing activities. Lecture time is not the place to do homework. Lab time is for working on your computer assignments, getting help as needed, reviewing homework, taking tests, etc. It is not the place to do homework, unless instructed to do so.

FINAL EXAMINATION: All classes will have a final exam, as indicated in the course syllabus.

TASP TEST:

IF YOU HAVE NOT TAKEN TASP, YOU MUST DO SO BEFORE CONTINUING WITH YOUR MAJOR SUBJECTS. THE NEXT TASP TEST WILL BE GIVEN ON JUNE 18, 1994. THE REGISTRATION DEADLINE IS MAY 20, 1994. YOU MUST PASS TASP PRIOR TO OBTAINING 60 CREDIT HOURS. IF YOU DO NOT, YOU MUST REMAIN IN PRE-TECH CLASSES ONLY.

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ENGLISH 020

CURRICULUM PACKAGE

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COURSE SYLLABUS 32

DATE: 06/09/94 TEXAS STATE TECHNICAL COLLEGE PAGE:
GOAL/OBJECTIVE LISTING - ABBREVIATED PROCESS

COURSE: ENGL.020 WRITING SKILLS II
DEPARTMENT: ENGL PRE-TECH ENGLISH

G/O NUMBER	TITLE	DOMAIN	LEVEL	LEC	LAB	PRAC	FLD
E020.01.00	LEARNING ADVANCED GRAMMAR SKILLS						
E020.01.01	Recognize and correct shifts or inconsistencies to attain smoothness and clearness in writing.	COGNITIVE	APPLY	1.0	3.0	1.0	
E020.01.02	Developing writing clarity and preventing misunderstanding.	COGNITIVE	APPLY	1.0	3.0	1.0	
E020.01.03	Accelerating techniques to make writing more concise.	COGNITIVE	APPLY	1.0	3.0	1.0	
E020.02.00	REPORT WRITING						
E020.02.01	Expanding the paragraph into common types of reports.	COGNITIVE	APPLY	1.0	3.0	1.0	
E020.03.00	BUSINESS DOCUMENT WRITING						
E020.03.01	Writing the main types of business letters and communications.	COGNITIVE	APPLY	1.0	3.0	1.0	

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COURSE: ENGL.020 WRITING SKILLS II
DEPARTMENT: ENGL PRE-TECH ENGLISH

OBJECTIVE: E020.01.00 LEARNING ADVANCED GRAMMAR SKILLS

OBJECTIVE: E020.01.01 Recognize and correct shifts or inconsistencies to attain smoothness and clearness in writing.

IMPORTANCE OF OBJECTIVE

It is important for students to master this objective to develop their thoughts clearly and concisely so that they move easily from one sentence to the next.

STUDENT WILL

Be able:

To identify and to correct inconsistencies in tense and voice of a verb.

To identify and to correct shifts in two pronoun forms: person and number.

TO THIS STANDARD

Students will pass all tests with a score of 75 percent or better, and generate effective sentences in all Applied Writings to the instructor's satisfaction.

ON THIS TYPE TEST(S)

Students will complete Module X Test A and Applied Writing X.

PERFORMANCE STANDARDS

OBJECTIVE: E020.01.02 Developing writing clarity and preventing misunderstanding.

IMPORTANCE OF OBJECTIVE

In order for writing to be meaningful, it must be understood.

STUDENT WILL

Be able:

To identify and correct unclear pronoun reference.

To identify and correct unclear or misplaced modifiers.

To define certain confusing pairs of words.

To identify and correct problems in parallel construction.

TO THIS STANDARD

Students will pass all tests with a score of 75 percent or better and generate effective sentences in all Applied Writings to the instructor's satisfaction.

ON THIS TYPE TEST(S)

Students will complete Module XI Test A and Applied Writing XI.

OBJECTIVE: E020.01.03 Accelerating techniques to make writing more concise.

IMPORTANCE OF OBJECTIVE

Students must train themselves to take a second look at their own writing so that they catch and eliminate errors and tighten their writing.

STUDENT WILL

Be able:

To eliminate unnecessary words in a sentence.

To eliminate cliches and slang in writing samples.

To combine like subjects and verbs for the purpose of brevity.

To subordinate ideas.

To reduce dependent clauses to single words.

TO THIS STANDARD

Students will pass all tests with a score of 75 percent or better, and generate effective sentences in all Applied Writings to the instructor's satisfaction.

ON THIS TYPE TEST(S)

Students will complete Module XII Test A and Applied Writing XII.

OBJECTIVE: E020.02.00 REPORT WRITING

OBJECTIVE: E020.02.01 Expanding the paragraph into common types of reports.

IMPORTANCE OF OBJECTIVE

The formats for the paragraph and the report are almost identical. Before a report can be constructed, it is necessary to understand the essential points in constructing a unified paragraph. The most important principle is that of logical organization.

STUDENT WILL

Be able:

To define the function of an outline in multiparagraph writing.

To prepare a multiparagraph report outline given three principles of organization.

To identify and use appropriately different report formats.

To write a variety of reports using the appropriate report format for each.

TO THIS STANDARD

Students will complete all assignments to the instructor's satisfaction.

ON THIS TYPE TEST(S)

None.

OBJECTIVE: E020.03.00 BUSINESS DOCUMENT WRITING

OBJECTIVE: E020.03.01 Writing the main types of business letters and communications.

IMPORTANCE OF OBJECTIVE

In order to be successful in the job market, students must master the communication skills required to convey information effectively.

STUDENT WILL

Be able:

To define the purpose and focus of business letter writing.

To write a variety of types of business letters using appropriate form and focus.

To compare the business letter and the office memo.

To write a variety of interoffice memos.

TO THIS STANDARD

Students will complete all assignments to the instructor's satisfaction.

ON THIS TYPE TEST(S)

None.

SEQ. NO.	G/O NUMBER	TITLE
	E020.01.01	Recognize and correct shifts or inconsistencies to attain smoothness and clearness in writing.

SUB-OBJ. NUMBER	TITLE
E020.01.01.01	Identify and correct inconsistencies in tense and voice of a verb.
E020.01.01.02	Identify and correct shifts in pronoun forms: person and number.

E020.01.02	Developing writing clarity and preventing misunderstanding.

SUB-OBJ. NUMBER	TITLE
E020.01.02.01	Identify and correct unclear pronoun reference.
E020.01.02.02	Identify and correct unclear or misplaced modifiers.
E020.01.02.03	Define confusing word pairs.
E020.01.02.04	Identify and correct problems in parallel construction.

E020.01.03	Accelerating techniques to make writing more concise.

SUB-OBJ. NUMBER	TITLE
E020.01.03.01	Eliminate unnecessary words in a sentence.
E020.01.03.02	Eliminate cliches and slang in writing samples.
E020.01.03.03	Combine like subjects and verbs for brevity.
E020.01.03.04	Subordinate ideas.
E020.01.03.05	Reduce dependent clauses to single words.

E020.02.01	Expanding the paragraph into common types of reports.

SUB-OBJ. NUMBER	TITLE
E020.02.01.01	Define the function of an outline in multiparagraph writing.
E020.02.01.02	Prepare a multiparagraph report outline given three principles of organization.

SEQ. NO.	G/O NUMBER	TITLE

E020.02.01.03	Identify and use appropriately two report formats.
E020.02.01.04	Write a technical procedure report, persuasive report, summary report, and recommendation report, using appropriate form for each.

E020.03.01 Writing the main types of business letters and communications.

SUB-OBJ. NUMBER	TITLE
E020.03.01.01	Define the purpose and focus of business letter writing.
E020.03.01.02	Write various types of business letters using appropriate form and focus.
E020.03.01.03	Compare the business letter and the office memo.
E020.03.01.04	Write various types of interoffice memos.

COURSE: ENGL.020 WRITING SKILLS II
DEPARTMENT: ENGL PRE-TECH ENGLISH

OBJECTIVE: E020.01.01 Recognize and correct shifts or inconsistencies to attain smoothness and clearness in writing.

SUB-OBJECTIVE: E020.01.01.01 Identify and correct inconsistencies in tense and voice of a verb.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To recognize when shifts in voice and tense occur, and to make appropriate corrections.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple-choice items to determine placement and assignments.

INTEREST

Unity is important to good writing. Once shifts are identified, errors that contribute to breakdowns in unity can be avoided.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module X.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module X.

SUB-OBJECTIVE: E020.01.01.02 Identify and correct shifts in prnoun forms: person and number.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To recognize when shifts in person and number occur, and to make appropriate corrections.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

Unity is important to good writing. Once shifts are identified, errors that contribute to breakdowns in unity can be avoided.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module X.

ASSESSMENT

Instructor verification and Module X test.

NEXT ASSIGNMENT

Next module on assignment sheet.

OBJECTIVE: E020.01.02 Developing writing clarity and preventing misunderstanding.

SUB-OBJECTIVE: E020.01.02.01 Identify and correct unclear pronoun reference.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To make sure every pronoun has a clear antecedent; to be sure there is no doubt about what the pronouns refers to.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

To avoid confusing the reader.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module XI.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module XI.

SUB-OBJECTIVE: E020.01.02.02 Identify and correct unclear or misplaced modifiers.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To eliminate confusion by repositioning misplaced phrases or clauses next tc the words they modify.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

A modifier in the wrong place can cause confusion.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module XI.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module XI.

SUB-OBJECTIVE: E020.01.02.03 Define confusing word pairs.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To be sure the word chosen means what the student intended.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

To eliminate confusion for the reader.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all activities in Module XI.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module XI.

SUB-OBJECTIVE: E020.01.02.04 Identify and correct problems in parallel construction.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To identify and correct problems in parallel construction.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

The reader should be unaware of the passage of words; violations of parallel construction can interrupt the reader's flow of thought.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module XI.

ASSESSMENT

Instructor verification and Module XI test.

NEXT ASSIGNMENT

Next module on assignment sheet.

OBJECTIVE: E020.01.03 Accelerating techniques to make writing more concise.

SUB-OBJECTIVE: E020.01.03.01 Eliminate unnecessary words in a sentence.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To eliminate unnecessary words in a sentence.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

Redundancy draws attention to itself and slows down the reader.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module XII.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module XII.

SUB-OBJECTIVE: E020.01.03.02 Eliminate cliches and slang in writing samples.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To eliminate the use of cliches and slang from writing.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

Cliches and slang indicate the writer is too lazy to find an appropriate, clear, and fresh way to convey the meaning; they tend to bog the reader down, causing him or her to be distracted from the writer's message.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module XII.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module XII.

SUB-OBJECTIVE: E020.01.03.03 Combine like subjects and verbs for brevity.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To smooth and refine writing.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

A sentence is sometimes slowed down by a needless interruption of thought. Combining subjects or verbs can add smoothness to the writing.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all assignments in Module XII.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module XII.

SUB-OBJECTIVE: E020.01.03.04 Subordinate ideas.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To smooth choppy sentences by using clause signals and subordinating secondary thoughts into dependent clauses.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assignments.

INTEREST

Frequently used short, choppy sentences give an unpleasant "bumpy" impression.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign textbook modules, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all activities in Module XII.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module XII.

SUB-OBJECTIVE: E020.01.03.05 Reduce dependent clauses to single words.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

Reducing dependent clauses to make a sentence flow better.

PRETEST

Diagnostic knowledge-based pretest consisting of fill-ins and multiple choice items to determine placement and assessment.

INTEREST

To enhance readability.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Administer Diagnostic Test, assign modules in textbook, assign CAI modules, prepare necessary checklists.

STUDENT ACTIVITIES

Complete all activities in Module XII.

ASSESSMENT

Instructor verification and Module XII test.

NEXT ASSIGNMENT

Next module on assignment sheet.

OBJECTIVE: E020.02.01 Expanding the paragraph into common types of reports.

SUB-OBJECTIVE: E020.02.01.01 Define the function of an outline in multiparagraph writing.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

The most important principle in report writing is that of logical organization; an outline is a way to categorize all the various points to ne included in the report, to get all ideas down in the proper order.

PRETEST

None.

INTEREST

When you set out to write a report, your task will go smoothly if you approach it in a systematic manner.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Assign modules in textbook and assign CAI modules.

STUDENT ACTIVITIES

Complete all assignments in Module XIII.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module XIII.

SUB-OBJECTIVE: E020.02.01.02 Prepare a multiparagraph report outline given three principles of organization.

DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To prepare a report outline.

PRETEST

None.

INTEREST

Outlining is not as difficult as many writers think it is. The outline should present the subject of your report and a procedure for discussing th subject.

INSTRUCTIONAL METHODS

Textbook, CAI modules.

INSTRUCTOR'S ACTIVITIES

Assign modules in textbook and assign CAI modules.

STUDENT ACTIVITIES

Complete all assignments in Module XIII.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module XIII.

SUB-OBJECTIVE: E020.02.01.03 Identify and use appropriately two report formats.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

There are two basic formats which can be used to create reports: inverted triangle and report plan.

PRETEST

None.

INTEREST

Having a choice of report formats will give more flexibility in writing.

INSTRUCTIONAL METHODS

Textbook.

INSTRUCTOR'S ACTIVITIES

Assign textbook modules.

STUDENT ACTIVITIES

Complete all assignments in Module XIII.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module XIII.

SUB-OBJECTIVE: E020.02.01.04 Write a technical procedure report, persuasive report, summary report, and recommendation report, using appropriate form for each.

DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To write a variety of reports using appropriate report formats.

PRETEST

None.

INTEREST

A technical procedure report explains how to do something; the persuasive report presents an argument to readers and then asks them to act; a recommendation report examines several alternatives, compares the results, and recommends one for adoption; a summary report summarizes a magazine article, progress on a project, or research on a subject.

INSTRUCTIONAL METHODS

Textbook.

INSTRUCTOR'S ACTIVITIES

Assign modules in textbook.

STUDENT ACTIVITIES

Complete all assignments in Module XIII.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next module on assignment sheet.

OBJECTIVE: E020.03.01 Writing the main types of business letters and communications.

SUB-OBJECTIVE: E020.03.01.01 Define the purpose and focus of business letter writing.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To define purpose and focus of business letter writing.

PRETEST

None.

INTEREST

When you write business letters, it is critical the reader understand the message; your letter should focus on the reader.

INSTRUCTIONAL METHODS

Textbook.

INSTRUCTOR'S ACTIVITIES

Assign modules in textbook.

STUDENT ACTIVITIES

Complete all assignments in Module XIV.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module XIV.

SUB-OBJECTIVE: E020.03.01.02 Write various types of business letters using appropriate form and focus.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

To learn and use various type of letter formats.

PRETEST

None.

INTEREST

You can achieve success in your letter writing by paying careful attention to (1) your purpose of clear communication, (2) your emphasis on the reader's self-interest, and (3) your positive wording.

INSTRUCTIONAL METHODS

Textbook.

INSTRUCTOR'S ACTIVITIES

Assign modules in textbook.

STUDENT ACTIVITIES

Complete all assignments in Module XIV.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module XIV.

SUB-OBJECTIVE: E020.03.01.03 Compare the business letter and the office memo.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

The memorandum is a form of communication used to relay information within a company.

PRETEST

None.

INTEREST

Like a business letter, the memo is an important part of business communication.

INSTRUCTIONAL METHODS

Textbook.

INSTRUCTOR'S ACTIVITIES

Assign modules in textbook.

STUDENT ACTIVITIES

Complete all assignments in Module XIV.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

Next section in Module XIV.

SUB-OBJECTIVE: E020.03.01.04 Write various types of interoffice memos.
DOMAIN: COGNITIVE LEVEL: APPLY

PURPOSE

There are three main types of memos.

PRETEST

None.

INTEREST

The memo follows the same basic guidelines of all good business writing: it should be organized, be proper in tone and form, and its message should be clear and concise.

INSTRUCTIONAL METHODS

Textbook.

INSTRUCTOR'S ACTIVITIES

Assign modules in textbook.

STUDENT ACTIVITIES

Complete all assignments in Module XIV.

ASSESSMENT

Instructor verification.

NEXT ASSIGNMENT

None.

TEXAS STATE TECHNICAL COLLEGE

SYLLABUS

ENGLISH 020

COURSE DESCRIPTION:

Review of basic sentence grammar and mechanical skills, with an emphasis on writing, editing, and revising paragraphs. Introduction to the multi-paragraph essay. Prerequisite: English placement test.

COURSE OBJECTIVES:

Upon completion, student will be able to:

1. Recognize and correct shifts or inconsistencies to attain smoothness and clearness in writing.
2. Develop writing clarity and prevent misunderstanding.
3. Demonstrate accelerated techniques to make writing more concise.
4. Choose appropriate words to convey intended meaning.
5. Expand vocabulary usage.
6. Vary word and sentence choice for purpose and audience.
7. Refine sentences and paragraphs into compositions exhibiting unity, clarity, and coherence.
8. Use the composing process and electronic media to plan and generate writing.
9. Write descriptive, persuasive, narrative, and expository paragraphs of increasing length and complexity.
10. Use electronic media to compose multiple-paragraph compositions.

11. Evaluate and revise content, organization, topic development, appropriate transition, clarity of language and appropriate word and sentence choice according to the purpose and audience for which the piece is intended.

12. Proofread written work for punctuation, spelling, grammatical and syntactical errors, paragraph indentation, margins, and legibility of writing.

13. Expand paragraphs into common types of reports.

14. Compose business letters and communications.

COURSE OUTLINE:

This is an individualized, self-paced course. All students are responsible for attending all classes until the requirements are met. Students will take a diagnostic test to determine placement and assignments. Students will be assigned various grammar modules (or comparable computer activities). At the completion of each module, the student will be given an appropriate module test. If the test is passed with 75% or better, the student will be given an applied writing exercise, including those for exempted modules. At the completion of all modules and applied writings, the student will take an in-class final grammar test. Upon passing, the student will go on to the report writing module, followed by the business letter module.

The class is scheduled for lecture and lab. During the lecture portion, the Instructor will review text material, grammar, spelling, vocabulary, and reading, and assign various writing activities. Lab time is for working on your computer assignments, getting help as needed, reviewing homework, taking tests, etc. During lab, students will complete SkillsBank, as assigned. The instructor will be available during all lab times. Lecture/lab hours will vary according to student needs.

All students will keep a writing/vocabulary/spelling journal. This journal will be collected at the end of the quarter.

There will be a final in-class report and a final grammar examination.

TEXTBOOK AND REQUIRED MATERIAL:

1. WRITING SKILLS FOR TECHNICAL STUDENTS, Delaware Technical & Community College, Prentice Hall.
2. College-level Dictionary
3 Notebook or binder and paper (not spiral)
4. 3-section notebook or binder
5. Writing implements

GRADING POLICY:

CLASSWORK

1 JOURNAL (W = 3/V = 2/S = 2) = 7 POINTS
5 TESTS @ 2 POINTS EACH = 10 POINTS
8 COMPUTER @ 1 POINTS EACH = 8 POINTS
5 IN-CLASS PARAGRAPHS @ 5 POINTS EACH = 25 POINTS

50 POINTS (25%)

TEXTBOOK

5 MISCELLANEOUS TESTS @ 1.5 POINTS EACH = 6.5 POINTS
3 GRAMMAR MODULE @ 1.5 POINTS EACH = 4.5 POINTS
4 REPORTS @ 2.5 POINTS EACH = 10 POINTS
4 LETTERS @ 2.5 POINTS EACH = 10 POINTS
1 IN-CLASS GRAMMAR FINAL = 10 POINTS

50 POINTS (25%)

FINAL EXAMS

1 GRAMMAR FINAL = 50 POINTS
1 PARAGRAPH FINAL = 50 POINTS

100 POINTS (50%)

TOTAL POINTS = 200 POINTS

A = 180+

B = 160-179

C = 140-159

F = Below 140

ABSENCES = -5 POINTS EACH

TASP OBJECTIVES/SKILLS
WRITING SKILLS

OBJECTIVE 1. To recognize the appropriate purpose, audience or occasion for a piece of writing
Skill 1. Recognize the appropriate purpose, audience or occasion for a piece of writing
2. Recognize writing that is appropriate for different purposes, audiences or occasions

OBJECTIVE 2. To recognize unity, focus and development in writing
Skill 1. Recognize writing that is not unified or focused
2. Maintain a consistent point of view
3. Recognize adequate development in a piece of writing

OBJECTIVE 3. To recognize effective organization in writing
Skill 1. Recognize methods of paragraph organization and the appropriate use of transitional words or phrases to connect ideas
2. Reorganize sentences to improve cohesion and the effective sequence of ideas

OBJECTIVE 4. To recognize effective sentences
Skill 1. Recognize ineffective repetition and inefficiency in sentence construction
2. Identify sentence fragments and run-on sentences
3. Identify standard subject-verb agreement
4. Identify standard placement of modifiers, parallel structure, and use of negatives in sentence formations
5. Recognize imprecise and inappropriate word choice

OBJECTIVE 5. To recognize edited American English usage
Skill 1. Recognize the standard use of verb forms and pronouns
2. Standard formation and use of adverbs, adjectives, comparatives, superlatives, and plural and possessive forms of nouns
3. Standard punctuation

WRITING SAMPLE

These characteristics will be considered in scoring the writing samples.

1. Appropriateness
2. Unity and focus
3. Development
4. Organization
5. Sentence structure
6. Usage
7. Mechanical conventions

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TASP PREPARATION CHECK LIST

READING

_______ Obj.1. Meaning of words and phrases..using context clues.

_______ Obj.2. Main idea and supporting ideas.

_______ Obj.3. Writer's purpose, pt. of view, intended meaning.

_______ Obj.4. Method of organization, draw conclutions.

_______ Obj.5. Relevance, importance; fact and opinion.

_______ Obj.6. summarize a passage; interpret graphs.

WRITING

To recognize:

_______ Obj.1. Purpose, audience

_______ Obj.2. Unity, focus, and development

_______ Obj.3. Effective organization

_______ Obj.4. Effective sentences

_______ Obj.5. English usage

_______ Essay

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Texas State
Technical College
Waco/Marshall

COURSE SYLLABUS

WRITING TASP REVIEW
Title

ENGL 090
Number

Prerequisite

CORI STANLEY
Prepared by

Approved by

MAY, 1994
Date

This Syllabus has been reviewed and is current on date indicated.

Reviewed by

Date

TEXAS STATE TECHNICAL COLLEGE

SYLLABUS

ENGLISH 090

COURSE DESCRIPTION:

An intensive review of writing for students who have not passed the writing portion of the TASP.

COURSE OBJECTIVES:

1. To recognize purpose and audience.
2. To recognize unity, focus and development in writing.
3. To recognize effective organization in writing.
4. To recognize sentences.
5. To recognize edited American English usage.
6. To pass the Writing Section of TASP.

COURSE OUTLINE:

Two (2) designated class hours are utilized for skill reinforcement through independent study and tutorial assistance. Computer-aided instruction is also provided using the SkillsBank program.

TEXTBOOK AND REQUIRED MATERIALS:

The Official TASP Test Study Guide, NES, 1991.

1. Paper and writing implements

GRADING POLICY:

The course graded pass/fail. Students are required to attend all classes until they are able to pass the Pre-TASP test with a score of 75% or better. Any student who is absent more than three (3) times will not receive credit for the course.

COMPETENCY/RESOURCE MATRIX

COMPETENCY STATEMENT	RESOURCES						
READING	BOOK 1	BOOK 2	BOOK 3	BOOK 4	COMP. 1	COMP. 2	COURSE
1. Use structural analysis to decode words.	Ch 1 1-21 Reading 1-14	Ch 1 Ch 9 Reading 1-24	P. 12, 18, 24, 57, 70, 74, 75		Vocab. 1-15	Lesson 26	Reading 020/030
2. Use contextual clues to decode words.	Ch 1	Ch 1, 9	P. 5, 13, 30, 44, 45,	Cluster 1-5	Word Know. 1-13	Lesson 26	Reading 020/030
3. Use dictionaries in determining word pronunciation and meaning.	Ch 2	Ch 2	(same) P. 58, 31-32	P. 7, 8, 10, 15, 19	Dict & Books 3, 5	Lesson 26	Reading 020/030
4. Use specialized dictionaries, atlas, almanac, bibliography, and text glossaries in determining word meaning.	Ch 2-4	Ch 2-4	(same)	(same)	Ref. Sec. 1-6	Lesson 27	Reading 020/030
5. Identify main idea and supporting details.	Ch 8	Ch 5-6	P. 24, 38, 50, 57, 62, 63, 69	Cluster 1-5 P. 13-14, 106, 107	Read. 3	Lesson 25, 34	Reading 020/030
6. Sequence events.	Ch 9b	Ch 7a	P. 23, 70	P. 18, 106- 107	Read. 2	Lesson 25	Reading 020/030
7. Perceive cause and effect relationships.		Ch 7e	P. 13, 69	Cluster 1-5 P. 22-23, 106, 107, 127-129	Read. 4		Reading 020/030
8. Evaluate and make critical analysis of information given.		Ch 7d Ch 12	P. 6, 14, 18, 30, 38, 39, 45, 76	Cluster 1-5 P. 22, 23, 68-69, 84-85, 100-101, 106-107, 11, 113, 127-129, 132, 135, 138, 140	Read. 5		Reading 020/030

COMPETENCY/RESOURCE MATRIX

COMPETENCY STATEMENT	RESOURCES						
READING	**BOOK 1**	**BOOK 2**	**BOOK 3**	**BOOK 4**	**COMP. 1**	**COMP. 2**	**COURSE**
9. Make generalizations based on information given.	Ch 9c Ch 12c	Ch 11 Ch 12 Ch 14	P. 51, 77	Cluster 1-5 P. 32, 84-85, 132, 135			Reading 020/030
10. Predict future events and outcomes.		Ch 10	P. 6	Cluster 1-5 P. 43-44, 84-85, 121-123, 132, 135			Reading 020/030
11. Follow written directions involving subordinate steps.	ALL	ALL	Ch. 1-14	Cluster 1-5	Consumer Info. 5	Lesson 25	Reading 020/030
12. Recognize and use deductive and inductive reasoning.		Ch 8 Ch 10 Ch 12	P. 6, 14, 19, 51, 68, 81, 87, 88	Cluster 1-5 P. 22-23, 68-69, 84-85, 100-101, 127-129, 132, 135			Reading 020/030
13. Evaluate integrity of publisher and effect of publication date on accuracy of context.							
14. Draw conclusions and make inferences.	Ch 10 Ch 11	Ch 8, Ch 10	P. 6, 19, 51, 68, 77, 81, 87	Cluster 1-5 P. 22-23, 53-54, 127-129	Read. 4		Reading 020/030
15. Judge logical validity.			P. 8, 30, 38, 45	P. 22-23, 100-101, 127-129	Consumer Info. 2		Reading 020/030
16. Test hypothesis.		Ch 12		(same)	Consumer Info. 2		Reading 030
17. Compare various viewpoints on the same topic.		Ch 7d Ch 12	P. 14, 15, 81	Cluster 1-5 P. 37-38, 48-50, 106-107	Read. 6-7		Reading 020/030
18. Interpret diagrams, graphs and statistical illustrations.	Ch 4	Ch 6		P. 64, 66, 78, 80, 89	Graphic 1-11	Lesson 29	Reading 020/030
19. Elaborate on ideas presented.		Ch 13 14, 15c	P. 29, 49, 51, 64, 77, 87, 88	Cluster 1-5 P. 32, 100-101			Reading 020/030

LEGEND:

BOOK 1 = Basic Reading Skills Handbook, Wiener/Bazerman, Houghton, 1991
BOOK 2 = Reading Skills Handbook, Wiener/Bazerman, Houghton, 1991
BOOK 3 = Reading Skills For Adults, Brown Book, Steck-Vaughn, 1992
BOOK 4 = Developing Reading Strategies, Horizons, Steck-Vaughn, 1991
COMP. 1 = Skills Bank. Vers. II and 3.1. Computer software. Skills Bank, 1994.
COMP. 2 = Job Skills Educational Program. Computer software. Loral, 1994.

Texas State
Technical College
Waco/Marshall

COURSE SYLLABUS

READING IMPROVEMENT II
Title

REA 020
Number

Prerequisite

CORI STANLEY
Prepared by

Approved by

MAY, 1994
Date

This Syllabus has been reviewed and is current on date indicated.

Reviewed by

Date

TEXAS STATE TECHNICAL COLLEGE

SYLLABUS

READING 020

COURSE DESCRIPTION:

Part I of an intermediate reading course designed to develop vocabulary, comprehension, study skills, and reading rate through lecture and independent study for students functioning on reading grade levels 5.0-7.9. Prerequisite: REA 010 or placement by diagnostic test.

COURSE OBJECTIVES:

A. **Vocabulary**

1. The ability to use context clues to determine the meaning of words.

B. **Comprehension**

1. Topic/Main Idea, and Supporting Details: The ability to identify the topic, main idea and supporting details of various works of writing, including technical materials.
2. Author's Intent: The ability to recognize an author's purpose and intent and evaluate the relevance of written material for a specific purpose or audience.
3. Organization of Ideas: The ability to organize ideas, identify transition words, make comparisons, recognize and analyze relationships, categorize, condense, and identify sequences in technical, scientific and research-related material.
4. Critical Reasoning: The ability to evaluate validity of author's argument, evaluate relevance of details, differentiate between fact and opinion, and draw logical conclusions.

C. **Reading Rate**

1. The ability to increase reading speed while comprehending what is read.

COURSE OUTLINE:

All students will take a Pre-TASP test to assess their reading abilities. This is an individualized, self-paced class. Students are responsible for completing all assignments in the textbook. Students are to read each chapter, complete drills and activities, check their answers with instructor, and complete the chapter test. There are nine chapters. In addition, there is a Unit test after Chapter 3, Chapter 6, and Chapter 9. At the end of the quarter students will retake the Pre-TASP test as a final exam to measure their growth. If all assignments are completed, students do not need to attend class. Instructor-supervised lab time is provided for independent study using the SkillsBank program, and/or conferencing.

TEXTBOOK AND REQUIRED MATERIALS:

PREP FOR BETTER READING, Adams, Harcourt Brace, 1992

1. 3-ring binder and paper (not spiral)

2. Writing implements

GRADING POLICY:

18 COMPREHENSION @ 25 POINTS EACH	=	450 POINTS	=	45%
9 CHAPTER TESTS @ 20 POINTS EACH	=	180 POINTS	=	18%
3 UNIT TESTS @ 40 POINTS EACH	=	120 POINTS	=	12%
1 FINAL EXAMINATION	=	250 POINTS	=	25%

A = 900+

B = 800-899

C = 700-799

F = Below 700

ABSENCES = -50 POINTS EACH

Texas State
Technical College
Waco/Marshall

COURSE SYLLABUS

READING IMPROVEMENT III
Title

REA 030
Number

Prerequisite

CORI STANLEY
Prepared by

Approved by

MAY, 1994
Date

This Syllabus has been reviewed and is current on date indicated.

Reviewed by

Date

TEXAS STATE TECHNICAL COLLEGE

SYLLABUS

READING 030

COURSE DESCRIPTION:

Part II of an intermediate reading course designed to develop vocabulary, comprehension, study skills, and reading rate through lecture and independent study for students functioning on reading grade levels 8.0-9.9. Prerequisite: REA 020 or placement by diagnostic test.

COURSE OBJECTIVES:

A. **Vocabulary**

   1. The ability to use context clues to determine the meaning of words.

B. **Comprehension**

   1. Topic/Main Idea, and Supporting Details: The ability to identify the topic, main idea and supporting details of various works of writing, including technical materials.

   2. Author's Intent: The ability to recognize an author's purpose and intent and evaluate the relevance of written material for a specific purpose or audience.

   3. Organization of Ideas: The ability to organize ideas, identify transition words, make comparisons, recognize and analyze relationships, categorize, condense, and identify sequences in technical, scientific and research-related material.

   4. Critical Reasoning: The ability to evaluate validity of author's argument, evaluate relevance of details, differentiate between fact and opinion, and draw logical conclusions.

C. **Reading Rate**

   1. The ability to increase reading speed while comprehending what is read.

COURSE OUTLINE:

All students will take a Pre-TASP test to assess their reading abilities. This is an individualized, self-paced class. The textbook is divided into four parts, plus a fifth section on reading textbooks. Each part contains reading instruction and a Vocabulary Preview. Each part also contains various reading selections, followed by a quiz. There are a total of 40 reading selections. Students are to read each chapter and complete all exercises, complete the Vocabulary Preview, read the selections, and complete the quiz. Students are expected to complete at least four reading selections from each chapter. At the end of the quarter students will retake the Pre-TASP test as a final exam to measure their growth. If all assignments are completed, students do not need to attend class. Instructor-supervised lab time is provided for independent study using the SkillsBank program, and/or conferencing.

TEXTBOOK AND REQUIRED MATERIALS:

DEVELOPING COLLEGE READING, Jacobus, Harcourt Brace, 1991.

1. 3-ring binder and paper (not spiral)

2. Writing implements

GRADING POLICY:

20 READING QUIZZES @ 2.5 POINTS EACH - = 50 POINTS
5 VOCABULARY @ 10 POINTS EACH = 50 POINTS
1 FINAL EXAMINATION = 100 POINTS

TOTAL POINTS = 200 POINTS

A = 180+

B = 160-179

C = 140-159

F = Below 140

ABSENCES = -5 POINTS EACH

TASP OBJECTIVES/ SKILLS
READING

OBJECTIVE 1. To determine the meaning of words and phrases
- Skill 1. To use the context of a passage to determine the precise meaning of words with multiple definitions.
  - 2. Use the context of a passage to determine the meaning of unfamiliar words and phrases
  - 3. Use the context of a passage to determine the particular meaning of figurative language in a passage

OBJECTIVE 2. To understand the main idea and supporting details in written materials
- Skill 1. Identify explicit and implicit main ideas in written passages
  - 2. Recognize ideas that support, illustrate or elaborate the main idea in a passage

OBJECTIVE 3. To identify a writer's purpose, point of view and intended meaning
- Skill 1. Recognize a writer's expressed or implied purpose for writing
  - 2. Evaluate the appropriateness of passage for a particular audience
  - 3. Use the content, word choice and phrasing to determine the writers point of view or opinion

OBJECTIVE 4. To analyze the relationship among ideas in written material
- Skill 1. To identify the method of organization used in a reading passage
  - 2. Draw conclusions from information stated or implied in a passage

OBJECTIVE 5. To use critical reasoning skills to evaluate written material
- Skill 1. Judge the relevance and importance of facts, reasons, examples, expert opinions or analogies used in written materials
  - 2. Distinguish between fact and opinion in written material

OBJECTIVE 6. To apply study skills to reading assignments
- Skill 1. Organize or summarize a passage for study purposes
  - 2. Interpret the information presented in a graph

Texas State
Technical College
Waco/Marshall

COURSE SYLLABUS

READING TASP REVIEW
Title

REA 090
Number

Prerequisite

CORI STANLEY
Prepared by

Approved by

MAY, 1994
Date

This Syllabus has been reviewed and is current on date indicated.

Reviewed by	Date

TEXAS STATE TECHNICAL COLLEGE

SYLLABUS

READING 090

COURSE DESCRIPTION:

An intensive review of reading for students who have not passed the reading portion of the TASP.

COURSE OBJECTIVES:

1. To determine the meaning of words and phrases.
2. To understand the main idea and supporting details in written material.
3. To identify a writer's purpose, point of view and intended meaning.
4. To analyze the relationship among ideas in written material.
5. To use critical reasoning skills to evaluate written material.
6. To apply study skills to reading assignments.
7. To pass the Reading Section of TASP.

COURSE OUTLINE:

Two (2) designated class hours are utilized for skill reinforcement through independent study and tutorial assistance. Computer-aided instruction is also provided using the SkillsBank program.

TEXTBOOK AND REQUIRED MATERIALS:

Reading Skills: Preparing for the TASP Test, Vern, Harcourt Brace, 1992.

1. Paper and writing implements

GRADING POLICY:

The course graded pass/fail. Students are required to attend all classes until they are able to pass the Pre-TASP test with a score of 75% or better. Any student who is absent more than three (3) times will not receive credit for the course.

ENGLISH 010/020 and
READING 020/030

INSTRUCTIONAL MODE:

This is a self-paced, individualized class. You will be given a diagnostic test to help determine what you already know and where best to begin. Your progress through assignments are recorded in your class folder. You need to be sure this is kept up to date. Work through your assignments, completing all exercises as indicated. **YOU ARE RESPONSIBLE FOR THE COMPLETION OF ALL ASSIGNMENTS.**

COMPUTER:

There are various computer programs we will be using depending upon individual student need. The reading classes will be working with the SkillsBank program. The writing classes will be using Practical Grammar, Job Skills Educational Program, and SkillsBank. You will be assigned an ID number and a password. It is your responsibility to keep this information accessible. A checklist will be provided to be kept in your folder. As you pass each lesson test, record your score on the checklist. If you do not pass the test, you may repeat it.

JOURNALS:

All writing students are required to keep a writing/spelling/vocabulary journal, which will be turned in for grading at the end of the quarter. Writing activities will be assigned during the lecture portion of the class. Students are to continuously add misspelled or difficult words to their spelling list by writing each word three times and then using it in a sentence. Students should continuously add new or unknown words to their vocabulary list by writing the definition and using the word in a sentence.

REFLECTION LOGS

At the end of each class all students will complete a Reflection Log, which is self-explanatory.

RULES FOR PAPERS TO BE TURNED IN:

All work which is turned in for grading must be properly headed. In the upper righthand corner write your name, your course, the current date, and the assignment. All work must be typed or written legibly. Sloppy work will not be accepted.

TEXTBOOKS:

In addition to the required textbooks listed in the course syllabus, all students must have a dictionary.

CLASS FOLDERS:

Each student will be given a class folder which will contain your Assignment Completion Record. The folder is to be filed in the white box for the English/ Reading classes behind the appropriate section.

ATTENDANCE:

You are expected to attend all classes until all requirements are satisfactorily met. There will be a daily sign-in sheet. You must sign-in when you enter and leave class, for any reason, including breaks. You must have the instructor or lab assistant verify your sign-in and out times.

GRADES:

Assignments will be graded on completion and accuracy. The grading scale is indicated in the course syllabus. Class participation is expected. Excessive absences will result in a lower grade.

You are expected to complete **all** assignments. If you attend all classes, but are unable to complete all assignments, you will be assigned an Incomplete. It is your responsibility to make arrangements with the Instructor to clear the incomplete. If you do not complete because of attendance or attitude, you will be given an F and expected to repeat the entire class.

LECTURE/LAB:

All students are scheduled for one to two hours of lecture per week. During this time the Instructor will lecture on text material, including grammar, spelling, vocabulary, and reading, and assign various writing activities. Lecture time is not the place to do homework. Lab time is for working on your computer assignments, getting help as needed, reviewing homework, taking tests, etc. It is not the place to do homework, unless instructed to do so.

FINAL EXAMINATION: All classes will have a final exam, as indicated in the course syllabus.

TASP TEST:

IF YOU HAVE NOT TAKEN TASP, YOU MUST DO SO BEFORE CONTINUING WITH YOUR MAJOR SUBJECTS. THE NEXT TASP TEST WILL BE GIVEN ON JUNE 18, 1994. THE REGISTRATION DEADLINE IS MAY 20, 1994. YOU MUST PASS TASP PRIOR TO OBTAINING 60 CREDIT HOURS. IF YOU DO NOT, YOU MUST REMAIN IN PRE-TECH CLASSES ONLY.

ENGLISH 010/020 and
READING 020/030

INSTRUCTIONAL MODE:

This is a self-paced, individualized class. You will be given a diagnostic test to help determine what you already know and where best to begin. Your progress through assignments are recorded in your class folder. You need to be sure this is kept up to date. Work through your assignments, completing all exercises as indicated. **YOU ARE RESPONSIBLE FOR THE COMPLETION OF ALL ASSIGNMENTS.**

COMPUTER:

There are various computer programs we will be using depending upon individual student need. The reading classes will be working with the SkillsBank program. The writing classes will be using Practical Grammar, Job Skills Educational Program, and SkillsBank. You will be assigned an ID number and a password. It is your responsibility to keep this information accessible. A checklist will be provided to be kept in your folder. As you pass each lesson test, record your score on the checklist. If you do not pass the test, you may repeat it.

JOURNALS:

All writing (English) students are required to keep a writing/spelling/vocabulary journal, which will be turned in for grading at the end of the quarter. Writing activities will be assigned during the lecture portion of the class. Students are to continuously add misspelled or difficult words to their spelling list by writing each word three times and then using it in a sentence. Students should continuously add new or unknown words to their vocabulary list by writing the definition and using the word in a sentence.

REFLECTION LOGS

At the end of each class all students will complete a Reflection Log, which is self-explanatory.

RULES FOR PAPERS TO BE TURNED IN:

All work which is turned in for grading must be properly headed. In the upper righthand corner write your name, your course, the current date, and the assignment. All work must be typed or written legibly. Sloppy work will not be accepted.

TEXTBOOKS:

In addition to the required textbooks listed in the course syllabus, all students must have a dictionary.

CLASS FOLDERS:

Each student will be given a class folder which will contain your Assignment Completion Record. The folder is to be filed in the white box for the English/Reading classes behind the appropriate section.

ATTENDANCE:

You are expected to attend all classes until all requirements are satisfactorily met. There will be a daily sign-in sheet. You must sign-in when you enter and leave class, for any reason, including breaks. You must have the instructor or lab assistant verify your sign-in and out times.

GRADES:

Assignments will be graded on completion and accuracy. The grading scale is indicated in the course syllabus. Class participation is expected. Excessive absences will result in a lower grade.

You are expected to complete all assignments. If you attend all classes, but are unable to complete all assignments, you will be assigned an Incomplete. It is your responsibility to make arrangements with the Instructor to clear the incomplete. If you do not complete because of attendance or attitude, you will be given an F and expected to repeat the entire class.

LECTURE/LAB:

All students are scheduled for one to two hours of lecture per week. During this time the Instructor will lecture on text material, including grammar, spelling, vocabulary, and reading, and assign various writing activities. Lecture time is not the place to do homework. Lab time is for working on your computer assignments, getting help as needed, reviewing homework, taking tests, etc. It is not the place to do homework, unless instructed to do so.

FINAL EXAMINATION: All classes will have a final exam, as indicated in the course syllabus.

TASP TEST:

IF YOU HAVE NOT TAKEN TASP, YOU MUST DO SO BEFORE CONTINUING WITH YOUR MAJOR SUBJECTS. THE NEXT TASP TEST WILL BE GIVEN ON JUNE 18, 1994. THE REGISTRATION DEADLINE IS MAY 20, 1994. YOU MUST PASS TASP PRIOR TO OBTAINING 60 CREDIT HOURS. IF YOU DO NOT, YOU MUST REMAIN IN PRE-TECH CLASSES ONLY.

Drafting

DATE: 03/25/94 TEXAS STATE TECHNICAL COLLEGE PAGE:

GOAL/OBJECTIVE LISTING - ABBREVIATED PROCESS

COURSE: DDT.104 DRAFTING PRINCIPLES
DEPARTMENT: DDT DRAFTING AND DESIGN TECHNOLOGY

G/O NUMBER	TITLE	DOMAIN	LEVEL	LEC	LAB	PRAC	FLD
DFTG.01.00	DEVELOPING BASIC DRAFTING SKILLS						
DFTG.01.01	Perform basic instrument drawing.	PSYCHOMOTOR	ACQUIRE/HABIT				
DFTG.01.02	Perform basic lettering.	PSYCHOMOTOR	ACQUIRE/HABIT				
DFTG.01.03	Construct basic geometric entities.	PSYCHOMOTOR	ACQUIRE/HABIT				
DFTG.01.04	Perform basic sketching.	PSYCHOMOTOR	ACQUIRE/HABIT				
DFTG.02.00	DRAWING ORTHOGRAPHIC PROJECTIONS						
DFTG.02.01	Construct multi-view drawings.	PSYCHOMOTOR	ACQUIRE/HABIT				
DFTG.02.02	Construct sectional views.	PSYCHOMOTOR	ACQUIRE/HABIT				
DFTG.02.03	Construct auxiliary view drawings.	PSYCHOMOTOR	ACQUIRE/HABIT				
DFTG.03.00	DESCRIBING FEATURE SIZE AND SHAPE						
DFTG.03.01	Perform basic dimensioning.	PSYCHOMOTOR	ACQUIRE/HABIT				
DFTG.03.02	Perform basic tolerancing.	PSYCHOMOTOR	ACQUIRE/HABIT				
DFTG.04.00	DRAWING PICTORIAL DRAWINGS						
DFTG.04.01	Construct axonometric drawing.	PSYCHOMOTOR	ACQUIRE/HABIT				
DFTG.04.02	Construct oblique drawing.	PSYCHOMOTOR	ACQUIRE/HABIT				
DFTG.04.03	Construct perspective drawing.	PSYCHOMOTOR	ACQUIRE/HABIT				

DATE: 03/25/94

TEXAS STATE TECHNICAL COLLEGE
GOALS/OBJECTIVES IN COURSE

PAGE:

COURSE: DDT.104 DRAFTING PRINCIPLES
DEPARTMENT: DDT DRAFTING AND DESIGN TECHNOLOGY

G/O NO.	TITLE	DATA A	DATA B	DATA
DFTG.01.00	DEVELOPING BASIC DRAFTING SKILLS			
DFTG.01.01	Perform basic instrument drawing.			
DFTG.01.02	Perform basic lettering.			
DFTG.01.03	Construct basic geometric entities.			
DFTG.01.04	Perform basic sketching.			
DFTG.02.00	DRAWING ORTHOGRAPHIC PROJECTIONS			
DFTG.02.01	Construct multi-view drawings.			
DFTG.02.02	Construct sectional views.			
DFTG.02.03	Construct auxiliary view drawings.			
DFTG.03.00	DESCRIBING FEATURE SIZE AND SHAPE			
DFTG.03.01	Perform basic dimensioning.			
DFTG.03.02	Perform basic tolerancing.			
DFTG.04.00	DRAWING PICTORIAL DRAWINGS			
DFTG.04.01	Construct axonometric drawing.			
DFTG.04.02	Construct oblique drawing.			
DFTG.04.03	Construct perspective drawing.			

COURSE: DDT.104 DRAFTING PRINCIPLES
DEPARTMENT: DDT DRAFTING AND DESIGN TECHNOLOGY

SEQ. NO	G/O NUMBER	TITLE
	DFTG.01.01	Perform basic instrument drawing.

SUB-OBJ NO	TITLE
DFTG.01.01.01	Learn idenitity and use of basic drafting tools.
DFTG.01.01.02	Learn drawing sheet set-up and layout.
DFTG.01.01.03	Learn to identify and select appropriate drawing media (paper/pencils/pens) for application.
DFTG.01.01.04	Identify and construct alphabet of lines.
DFTG.01.01.05	Learn to identify and use drawing scales.

DFTG.01.02 Perform basic lettering.

SUB-OBJ NO	TITLE
DFTG.01.02.01	Identify lettering styles.
DFTG.01.02.02	Describe, demonstrate, and practice appropriate lettering technique.

DFTG.01.03 Construct basic geometric entities.

SUB-OBJ NO	TITLE
DFTG.01.03.01	Identify basic entities by learning identity nomeclature and by constructing entities with drawing instruments.
DFTG.01.03.02	Construct composite drawings.

DFTG.01.04 Perform basic sketching.

SUB-OBJ NO	TITLE
DFTG.01.04.01	Relate importance/application of technical sketching.

COURSE: DDT.104 DRAFTING PRINCIPLES
DEPARTMENT: DDT DRAFTING AND DESIGN TECHNOLOGY

SEQ. NO	G/O NUMBER	TITLE
	DFTG.01.04.03	Sketch basic geometric entities using proper technique.
	DFTG.01.04.04	Sketch composite parts using proper techniques.

DFTG.02.01 Construct multi-view drawings.

SUB-OBJ NO	TITLE
DFTG.02.01.01	Learn to visualize objects in 2 and then 3-dimension.
DFTG.02.01.02	Illustrate "glass box" principle (projection of views).
DFTG.02.01.03	Describe appearance of points, lines, curves and planes with regard to their relationship with multi-view projection.
DFTG.02.01.04	Demonstrate multi-view construction.

DFTG.02.02 Construct sectional views.

SUB-OBJ NO	TITLE
DFTG.02.02.01	Define need for sectional views in technical drawing (show complicated interiors).
DFTG.02.02.02	Distinguish between types of sectional views and their uses in technical drafting.
DFTG.02.02.03	Demonstrate sectional view construction.

DFTG.02.03 Construct auxiliary view drawings.

SUB-OBJ NO	TITLE
DFTG.02.03.01	Define need for auxiliary views in technical drawing (show feature in true size and shape.

SEQ. NO	G/O NUMBER	TITLE
		principle orthographic views (glass box).

DFTG.02.03.03	Demonstrate auxiliary view construction.

DFTG.03.01 Perform basic dimensioning.

SUB-OBJ NO	TITLE
DFTG.03.01.01	Relate need for size and shape description of mechanical components.
DFTG.03.01.02	Identify lines and figures used in dimensioning.
DFTG.03.01.03	Illustrate basic dimension placement.
DFTG.03.01.04	Illustrate dimensioning based on part geometric breakdown.
DFTG.03.01.05	Demonstrate mechanical part dimensioning.

DFTG.03.02 Perform basic tolerancing.

SUB-OBJ NO	TITLE
DFTG.03.02.01	Relate need for tolerancing (total amount a specific dimension is permitted to vary).
DFTG.03.02.02	Define related terms: nominal size, basic size, tolerance, limit and allowance.
DFTG.03.02.03	Illustrate methods of specifying tolerances (unilateral, bilateral, limit).
DFTG.03.02.04	Demonstrate mechanical part tolerancing.
DFTG.03.02.05	Relate need for geometrical tolerancing (variation of form or position).
DFTG.03.02.06	Define geometric characteristics and their symbols.
DFTG.03.02.07	Illustrate methods of specifying geometric tolerances.

SEQ. NO G/O NUMBER TITLE

tolerancing.

DFTG.04.01 Construct axonometric drawing.

SUB-OBJ NO	TITLE
DFTG.04.01.01	Define axonometric drawing and its place in technical drawing applications.
DFTG.04.01.02	Define and illustrate types of axonometric drawings (isometric, dimetric, trimetric).
DFTG.04.01.03	Demonstrate axonometric construction from a multi-view drawing.

DFTG.04.02 Construct oblique drawing.

SUB-OBJ NO	TITLE
DFTG.04.02.01	Define oblique projection and its place in technical drawing applications.
DFTG.04.02.02	Illustrate principals of oblique projection construction.
DFTG.04.02.03	Demonstrate oblique projection construction from a given multi-view drawing.

DFTG.04.03 Construct perspective drawing.

SUB-OBJ NO	TITLE
DFTG.04.03.01	Define perspective and it place in technical drawing applications.
DFTG.04.03.02	Define and illustrate main elements of perspective drawing: observers eye, object being viewed, plane of projection, and projectors from the observers eye to all points
DFTG.04.03.03	Illustrate simple perspective construction.
DFTG.04.03.04	Demonstrate perspective construction from given multi-view drawing.

TEXAS STATE TECHNICAL COLLEGE

DEPARTMENT: Manufacturing Engineering Technology
COURSE: Drafting Principles

DATE: 3-19-94
NO: DDT 104

COURSE SYLLABUS

PREREQUISITES: None

COURSE DESCRIPTION: A course consisting of basic exercises in geometric construction, orthographic projection, dimensioning and tolerancing, and pictorial representation.

TEXTBOOK AND REQUIRED MATERIALS: Technical Drawing, Giesicke
Drafting Kit #1

EXPECTED LEARNING OUTCOMES: At completion of course student will be able to construct and dimension industry standard orthographic and pictorial drawings.

METHODS OF EVALUATION: Drafting work completed by the student will be evaluated based on the following criteria: accuracy, speed, legibility, and neatness.

SEQ. NO.	G/O NUMBER	TITLE
	DFTG.01.01	Perform basic instrument drawing.

SUB-OBJ. NUMBER	TITLE
DFTG.01.01.01	Learn idenitity and use of basic drafting tools.
DFTG.01.01.02	Learn drawing sheet set-up and layout.
DFTG.01.01.03	Learn to identify and select appropriate drawing media (paper/pencils/pens) for application.
DFTG.01.01.04	Identify and construct alphabet of lines.
DFTG.01.01.05	Learn to identify and use drawing scales.

DFTG.01.02 Perform basic lettering.

SUB-OBJ. NUMBER	TITLE
DFTG.01.02.01	Identify lettering styles.
DFTG.01.02.02	Describe, demonstrate, and practice appropriate lettering technique.

DFTG.01.03 Construct basic geometric entities.

SUB-OBJ. NUMBER	TITLE
DFTG.01.03.01	Identify basic entities by learning identity nomeclature and by constructing entities with drawing instruments.
DFTG.01.03.02	Construct composite drawings.

DFTG.01.04 Perform basic sketching.

SUB-OBJ. NUMBER	TITLE
DFTG.01.04.01	Relate importance/application of technical sketching.
DFTG.01.04.02	Identify different types of sketches.
DFTG.01.04.03	Sketch basic geometric entities using proper technique.
DFTG.01.04.04	Sketch composite parts using proper techniques.

DFTG.02.01 Construct multi-view drawings.

SUB-OBJ. NUMBER	TITLE
DFTG.02.01.01	Learn to visualize objects in 2 and then 3-dimension.

SEQ. NO.	G/O NUMBER	TITLE
	DFTG.02.01.02	Illustrate "glass box" principle (projection of views).
	DFTG.02.01.03	Describe appearance of points, lines, curves and planes with regard to their relationship with multi-view projection.
	DFTG.02.01.04	Demonstrate multi-view construction.

DFTG.02.02 Construct sectional views.

SUB-OBJ. NUMBER	TITLE
DFTG.02.02.01	Define need for sectional views in technical drawing (show complicated interiors).
DFTG.02.02.02	Distinguish between types of sectional views and their uses in technical drafting.
DFTG.02.02.03	Demonstrate sectional view construction.

DFTG.02.03 Construct auxiliary view drawings.

SUB-OBJ. NUMBER	TITLE
DFTG.02.03.01	Define need for auxiliary views in technical drawing (show feature in true size and shape.
DFTG.02.03.02	Recognize auxiliary view relationship to principle orthographic views (glass box).
DFTG.02.03.03	Demonstrate auxiliary view construction.

DFTG.03.01 Perform basic dimensioning.

SUB-OBJ. NUMBER	TITLE
DFTG.03.01.01	Relate need for size and shape description of mechanical components.
DFTG.03.01.02	Identify lines and figures used in dimensioning.
DFTG.03.01.03	Illustrate basic dimension placement.
DFTG.03.01.04	Illustrate dimensioning based on part geometric breakdown.
DFTG.03.01.05	Demonstrate mechanical part dimensioning.

DFTG.03.02 Perform basic tolerancing.

SUB-OBJ. NUMBER	TITLE
DFTG.03.02.01	Relate need for tolerancing (total amount a specific dimension is permitted to vary).

SEQ. NO.	G/O NUMBER	TITLE
	DFTG.03.02.02	Define related terms: nominal size, basic size, tolerance, limit and allowance.
	DFTG.03.02.03	Illustrate methods of specifying tolerances (unilateral, bilateral, limit).
	DFTG.03.02.04	Demonstrate mechanical part tolerancing.
	DFTG.03.02.05	Relate need for geometrical tolerancing (variation of form or position).
	DFTG.03.02.06	Define geometric characteristics and their symbols.
	DFTG.03.02.07	Illustrate methods of specifying geometric tolerances.
	DFTG.03.02.08	Demonstrate mechanical part feature tolerancing.

DFTG.04.01 Construct axonometric drawing.

SUB-OBJ. NUMBER	TITLE
DFTG.04.01.01	Define axonometric drawing and its place in technical drawing applications.
DFTG.04.01.02	Define and illustrate types of axonometric drawings (isometric, dimetric, trimetric).
DFTG.04.01.03	Demonstrate axonometric construction from a multi-view drawing.

DFTG.04.02 Construct oblique drawing.

SUB-OBJ. NUMBER	TITLE
DFTG.04.02.01	Define oblique projection and its place in technical drawing applications.
DFTG.04.02.02	Illustrate principals of oblique projection construction.
DFTG.04.02.03	Demonstrate oblique projection construction from a given multi-view drawing.

DFTG.04.03 Construct perspective drawing.

SUB-OBJ. NUMBER	TITLE
DFTG.04.03.01	Define perspective and it place in technical drawing applications.
DFTG.04.03.02	Define and illustrate main elements of perspective drawing: observers eye, object being viewed, plane of projection, and projectors from the observers eye to all poin
DFTG.04.03.03	Illustrate simple perspective construction.
DFTG.04.03.04	Demonstrate perspective construction from

COURSE: DDT.104 DRAFTING PRINCIPLES
DEPARTMENT: DDT DRAFTING AND DESIGN TECHNOLOGY

OBJECTIVE: DFTG.01.00 DEVELOPING BASIC DRAFTING SKILLS

IMPORTANCE OF OBJECTIVE

Basic drafting principles are the building blocks for being able to graphically represent information regardless of form.

OBJECTIVE: DFTG.02.00 DRAWING ORTHOGRAPHIC PROJECTIONS

IMPORTANCE OF OBJECTIVE

Orthographic projection is the standard for mechanical part representation throughout the world. It is the control document for design, manufacture, and quality in the manufacturing workplace. Knowledge of orthographic projection is a mandatory prerequisite for working in a manufacturing environment.

GIVEN THESE RESOURCES

STUDENT WILL

Successfully create a multi-view drawing to text standards.

TO THIS STANDARD

Satisfactory performance will require the completion of a multi-view drawinc to text standards, completed in a timely manner.

ON THIS TYPE TEST(S)

Hands-On Performance showing proficient use of drafting instruments and knowledge of basic drafting principles.

DEVELOPMENT SOURCE

OBJECTIVE: DFTG.03.00 DESCRIBING FEATURE SIZE AND SHAPE

IMPORTANCE OF OBJECTIVE

The drawing gives a graphical representation of the part - dimensions tell the manufacturer what size to make it to. Dimensioning and tolerancing make or break a products development. It is the designer's responsibility to make sure the part is properly defined.

GIVEN THESE RESOURCES

The student will have access to the text and a copy of ANSI Y 14.5.

STUDENT WILL

Construct and fully dimension a multi-view drawing of a mechanical part.

TO THIS STANDARD

Satisfactory performance will require adherence to industry drawing standards set forth in the text and in ANSI Y14.5. The results will be due within the scheduled laboratory time period.

ON THIS TYPE TEST(S)

Hands-On Performance showing individual problem solving and drafting technique application.

DEVELOPMENT SOURCE

To be developed.

OBJECTIVE: DFTG.04.00 DRAWING PICTORIAL DRAWINGS

IMPORTANCE OF OBJECTIVE

A fully dimensioned and accurately drawn multi-view drawing can be somewhat difficult to read. The mechanical designer must be able to relate ideas back and forth between two and three dimensional representation types. This is important in all phases of product development.

GIVEN THESE RESOURCES

The student will have access to the text and other necessary references.

STUDENT WILL

Construct pictorial drawings from given multi-view mechanical drawings.

TO THIS STANDARD

Satisfactory performance will require adherence to specifications/standards described in the text and ANSI Y14.5. A time limit corresponding to the scheduled lab time will be enforced.

ON THIS TYPE TEST(S)

Hands-On Performance based on adherence to text standards.

DEVELOPMENT SOURCE

To be developed.